

CITY OF MANCHESTER, NEW HAMPSHIRE



MAY - 2 2006



Stormwater Management Program Annual Report

May 1, 2005 through April 30, 2006



**City Of Manchester
Department of Highways
Environmental Protection Division**

300 Winston Street
Manchester, New Hampshire 03103-6826
(603) 624-6595 Fax (603) 628-6234

Frank C. Thomas, P.E.
Public Works Director

Kevin A. Sheppard, P.E.
Deputy Public Works Director

April 27, 2006

Ms. Thelma Murphy
U.S. Environmental Protection Agency
Water Technical Unit (SEW)
P.O. Box 8127
Boston, MA 02114-8127

#06-002-EPC

RE: NPDES II Small MS4 General Permit Annual Report -
EPA NPDES Permit Number: NHR041017

Dear Ms Murphy:

Herein is the annual Stormwater Management Program report for the year ending April 30, 2006 for the City of Manchester, New Hampshire. This document completes the annual program reporting requirements for this third year of the program.

Included are updates and new information regarding the Six Minimum Controls; Best Management Practices (BMPs) as outlined in the programs required tasks.

There are two excel spreadsheets with task description, implementation status of the BMP, priority of task and completion dates if applicable. At the bottom of this chart is a brief explanation of some of the BMPs.

The annual report requires an assessment of the BMPs to determine the degree of effectiveness. This report completes the third year of the program. The three-year history now allows the City to evaluate the effectiveness of many of the program tasks.

If you should have any questions or concerns in regards to this report please give our Storm Water Program Coordinator, Rick Cantu, a call at (603) 624-6513.

Sincerely,

Frank C. Thomas, P.E.
Director of Public Works

Cc: NHDES – Concord, NH
Fred J. McNeill, P.E. – City of Manchester

Manchester's Storm Water Management Program Summary

Priority Listing In-House

BMP#	Description	Develop	Implement	End Date	Priority	Completed
1-1	Assign SW Coordinator	8/1/2003	5/17/2003	7/30/04	A	5/17/03
1-2	Add SW Info to City's Website	10/1/04 (1)	Ongoing	3/21/04	C	10/7/2003
1-3	Outreach with Local watershed groups	10/1/04 (2)	Ongoing	7/30/04	B	Ongoing
1-4	Brochures available DPW & library	7/1/04 (3)	Summer 04	7/1/06 (3)	D	Summer 04/ ongoing
1-5	Signage @ Urban Ponds	9/1/03 (4)		3/21/04	B	9/25/2003
1-6	Pet Waste Brochure & Signage	7/30/04 (5)	Draft done 3/04	7/1/06	C	1/28/2005

2-1	Comply with State Public Notice	Ongoing - provide notice when NOI & SWMP are effective.				City Protocol
2-2	Annual Household Haz-waste Day	Ongoing - Info provided by Recycling Coordinator				May 14 & Oct 08
2-3	Collect Used Oil, batteries & tires	Ongoing - Info provided by Recycling Coordinator				12/31/05
2-4	Urban Forestation "Green Street Program" Mike Baer	Ongoing -	126 trees for the year 2005		C	12/31/05
2-5	Stormwater & Combined Sewer Hotline 665-6899	9/1/03	7/30/04 (6)	ASAP	A	8/26/03

3-1	Present Draft Storm Sewer Ordinance In Process	12/1/03 (7)	7/30/2005	7/30/2006	A	2/4/04
3-2	Dry weather screening of outfalls 2X/5yrs	4/1/04 (8)	Summer 04	9/30/2005	B	Completed
3-3	Develop & Implement Illicit Discharge Protocol	1/1/04 (9)	Ongoing	7/30/08	A	8/1/03
3-4	Map Outfalls & Receiving Waters	Ongoing, develop system to assure data is updated in GIS				12/12/2005

Priority list is **A** being **most important** with **D** being **least important**
Notes listed below correspond to their numbered counterpart above.

(1)	City Storm Water Website is expansive. URL - http://www.manchesternh.gov/CityGov/dpw/EPD/stormwater/home.html
(2)	Crystal Lake Association, Dorrs Pond Preservation Society, Pine Island Pond Environmental Society - Determine how we will continue supporting these groups now that the Urban Ponds Coordinator position has ended.
(3)	Assess existing brochures developed to date.. Additional brochures to be developed in year 2006. Distribute billing inserts three times over the coming year.
(4)	Signs have been erected and now are on the annual maintenance list.
(5)	Completed in 2005. Brochures given to new dog owners or mailed to first time dog owners.
(6)	Published in 2005. Will send out three bill stuffers in 2006 with the storm water hotline information.
(7)	Ordinance went before City Council and passed the first hurdle. It will be adopted after review in 'Bills on Second Reading' - June 2006
(8)	One round completed by the State of New Hampshire field staff. Follow up inspection completed by EPD staff. The plan is to do one outfall screening on an annual basis and include the 1 Screening in Summer 2004 during low
(9)	Train Street crews in Detection of Illicit Discharges. Review EPA/Center for Watershe Protection Manual and incorporate any chages into the City's existing protocol.

Manchester's Storm Water Management Program Summary

Priority Listing In-House

BMP#	Description	Develop	Implement	End Date	Priority	Completed
4-1	Ordinance - Erosion, Sediment & Construction Material http://www.manchesternh.gov/CityGov/dpw/HWY/files/93BAE5B68943418C9C4287770185F97C.pdf	12/1/2003 (10)	6/21/2004	City's New Manual	B	In Draft Ordinance
4-2	Develop Procedure for Public Comment	9/1/03 (11)	Outline City Protocol for SWMP		B	8/1/2003
4-3	Check Erosion & Construction Material Onsite	(Developed winter of 2003)	List used at inspections		B	In Use
5-1	Ordinance for Runoff Controls for Developments	12/1/2003	Included in the Draft Ordinance		B	In Draft Ordinance
5-2	Recommend BMP Manual for Planners & Developers	8/1/2003	Manuals outlined in BMP #5-2 pg, 15		A	DPW manual
6-1	Install Silt Fence Around Snow Dump	9/30/03 (12)	11/1/2005	Annually	A	11/1/05
6-2	Track CB Cleaning Program, Priority Basins Annually	8/1/03 (13)	9/15/03	Ongoing	A	12/31/05
6-3	Sweep Streets 3X Annually	9/1/2003 (14)	Before Phase II	Ongoing	B	Min 3X/yr.
6-4	SOPs for Disposal of CB and Street Sweeping Residuals	8/1/03 (15)	Visit 6/26/03	In Practice	B	Submitted Grant
6-5	Minimize Salt Usage, Maintain Cover Over Salt Storage	12/1/03 (16)	Nov-05	Ongoing	B	11/1/05
6-6	Program to Clean Pond Inlets and Trash Racks	8/15/03 (17)	Baffle Tank Sched	Annually	B	4/1/06
6-7	Develop/Implement Employee Education Program	9/1/03 (18)		Ongoing	A	3/22/06
6-8	Design & Construct Pond Specific P2 Projects	8/31/03 (19)	2000 with SEPP	Ongoing	B	CEI Contract
6-9	BMPs for Derryfield Country Club	12/31/03 (20)	Spring/Summer 04	7/30/2006	C	8/1/04

Priority list is A being **most important** with D being **least important**
 Notes listed below correspond to their numbered counterpart above.

(10)	Included in the Draft Ordinance
(11)	Public Hearing on Ordinance on October 3, 2005. Received and incorporated public comments.
(12)	Snow is piled in an unused lot. The silt fence is left after snow season. The fence is checked in November and fixed if necessary.
(13)	Sheet has been designed and was used in last reporting year and this reporting year.
(14)	Keeping with the existng schedule that has been in place for many years. Mild winter means more street sweeping than usual.
(15)	Current practice is adequate. Looking to obtain a grant to enhance the process.
(16)	Current practice is carried forward. Annual calibration of sander/salter before season begins. Snow melter used if warranted.
(17)	Checklist developed and in use. List submitted with last years report and again this year. Adding structures as they are installed.
(18)	Crews have been trained every year. Newsletter reaches all City Employees. The City's website has many beneficial links.
(19)	CEI is designing final Supplemental Environmental Projects Programs project for Nutts Pond. Awaiting information on Grant & Permits.
(20)	Review of Country Club practices completed. Will develop a spill program for the maintenance garage. Will review grounds for erosion.

Certification Statement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Frank Thomas

Date: 4/27/06

Frank C. Thomas, P.E.
Director of Public Works

BMP #1 Public Education and Outreach

#1-1, Assign Storm Water Coordinator - (BMP completed)

Current Status: The City of Manchester hired the storm water coordinator on May 17, 2003. The title for this position is Environmental Permits Coordinator.

BMP Effectiveness Evaluation: This position allows the City to remain in compliance with the requirements of the program. The City has taken the lead in the regional storm water group. Without the Storm Water Coordinator position Manchester would have a difficult time complying with the program requirements. The position has allowed the City to meet or exceed the level of expectations of the regulatory agencies.

Future Goals: To continue the implementation of the five-year program and complete the outlined tasks within the time frame specified in the original submission. To expand the program to review storm water issues not outlined in the tasks that are required under the program.

The coordinator expects to perform annual inspection of the outfalls along the Piscataquog and Merrimack Rivers. The 15 outfalls identified by the New Hampshire Department of Environmental Services will receive additional random inspections.

There are two Industrial Pretreatment personnel available to assist the Storm Water Coordinator to track illicit discharges. There are also staff available from the Highway Department sewer crews

The Engineering inspection staff is trained to report back to the Storm Water Coordinator any failures noted with construction BMP compliance during their field inspections.

The jet vac, sewer crews have been trained to identify instances of varying pollutants found in catch basins and drainage swales. When these are found, the Storm Water Coordinator is notified and a follow up on the notification completed.

#1-2, Add Stormwater Information to the City's Website – (BMP Completed)

Current Status: The City of Manchester uploaded the initial storm water website on October 7, 2003 consisting of four pages. Over the past two and a half years the site has continued to grow. The site is now home to an expanding site and can be accessed at the following url: <http://www.manchesternh.gov/CityGov/dpw/EPD/stormwater/home.html>

The home page has informational links to the six minimum controls and a link to a draft copy of the proposed Ordinance and Regulations.

The Citizens awareness page has links to three BMP control pages of the six minimum control requirements.

The Public Education and Outreach page has links to Manchester's recycling program and to the EPA's, "Stop Pointless Personal Pollution" activities site.

The Public Participation page has links to Manchester's Urban Pond Program website and also to EPA's Storm Water Outreach Materials website.

The Urban Pond web site is an extension of the Supplemental Environmental Projects Programs and contains extensive information on the health of the Urban Ponds. This is an important sub link, as one of the main storm water program functions is to assess, monitor and improve the environmental quality of the City's ponds.

The Illicit Discharge page briefly outlines the steps the City takes in tracking Illicit Discharges. This web page is a synopsis of the 10-page protocol for Illicit Discharges developed in September 2003 and submitted with the first storm water report in May of 2004.

The Construction Site Runoff Controls page has nine outside links to BMPs used in other areas of the country.

The Post Construction Runoff page has 13 links to structural BMP informational sites. The page also has 12 links to non-structural BMPs sites.

The "Contractor Requirements" page has links to the EPA's Notice of Intent page and the ENOI filing page. There is also a link to an example Storm Water Pollution Prevention Plan. A short slide show on contractor obligations regarding the Storm Water Program can be found on this page.

The left navigation bar has a link to a "Frequently Asked Questions" page with 14 commonly asked questions and accompanying answers.

BMP Effectiveness Evaluation: This BMP is proving to be highly effective in regards to having a central location with storm water information for public access. In reviewing several municipal storm water web sites (Attachment A) throughout the U.S., Manchester believes it has one of the top informational sites currently published.

Future Goals: To continue to expand upon the information contained in the site. To review the site quarterly to assure the information is up-to-date and relevant. The City would also like to include a student page with more informational links to activities that target elementary and middle school age students.

#1-3, Conduct Outreach with Local Watershed Organizations –

Current Status: Storm drain stenciling was completed at Pine Island Pond on May 14, 2005.

The Urban Ponds Program Coordinator interacted with local watershed organizations within Manchester that included the Dorrs Pond Preservation Society, the newly formed

Pine Island Pond Environmental Society (PIPES), the Crystal Lake Society and the Piscataquog Watershed Association.

The Urban Pond Coordinator position was terminated in February of 2005 and was carried within the Planning Department through December 2005 when it was ended. There is no longer an individual assigned to coordinate these activities.

The City is applying for a Healthy Communities Grant to support the watershed organizations over the next two years. A copy of the one-page screening application is included as Attachment B. The application was approved and the City will proceed on the full grant submission for May 26, 2006.

BMP Effectiveness Evaluation: The outreach was effective through 2005. It is anticipated that the Conservation Commission will become more interactive with these watershed groups. This task could lose ground over this reporting year as there is no designated person or department to pick up where the Urban Pond Coordinator left off.

Future Goals: To review all tasks performed by the Urban Pond Coordinator. Rank the Urban Pond tasks by priority of need and results produced. Sit with the Supplemental Environmental Projects Programs committee to determine how best to carry on the functions that have produced good results and support storm water management. Decide to what extent the Storm Water Coordinator will interact with these organizations. Determine how these functions are best incorporated into the storm water program. Make these findings part of the five-year close out report required by the SEPP program. Manchester also plans to submit the full grant request if the initial proposal makes it through the screening process.

#1-4, Make Brochures Available at the DPW and Public Libraries – (BMP Completed)

Current Status: The City continues to rely on the brochures previously developed and recently proposed to continue to educate the public. These brochures will again be made available during environmental events within the City and placed at other public locations.

The City provides the RiverSmart's brochure titled, "10 Tips for Conserving Water" at the EPD billing office.

The City distributes bookmarks, EPA children crossword place mats, rulers with 10 "Earth Care Tips" and pencils for Earth Day celebration.

The City provides students with the City made brochure explaining the "Wastewater Treatment Process" (provided in the first storm water report), when visiting classrooms to teach students.

As stated in last year's goals, a two-sided envelope stuffer (Attachment C) was designed and costs for preparation of 24,000 brochures were obtained. In review of this brochure and discussions with the SEPP committee, it was decided to cut the brochure in thirds and provide some information over three billing cycles, rather than bombard the users with one overwhelming brochure.

BMP Effectiveness Evaluation: It is difficult to gage the effectiveness of this BMP. We have received token feedback from the general public. We know the information is getting out to the public. It is unclear if the handouts are being read and used as intended.

Future Goals: To finalize the information on the bill stuffer brochure. Assure that each 1/3 section is brief, but informative. To begin placing these brochures within the sewer bills by the 1st billing cycle in July of 2006. Advertise the website, storm water hotline and places where information can be obtained. Develop a notification for next year's billing cycles.

#1-5, Develop, Install & Maintain Signage at Urban Ponds – (BMP Completed)

Current Status: The signage information that was presented in the first report is still applicable. There are issues with vandalism, but these signs are repaired in the spring when the Parks & Recreation department begins to prepare the Urban Pond areas for public usage.

BMP Effectiveness Evaluation: It is difficult to gage the effectiveness of this BMP. The signs are only effective if read. The kiosks are at the popular entrance areas of each pond and are easily accessible. The individuals who frequent the area most will probably maintain more of the sign's information through subconscious familiarity.

Future Goals: The goal is to maintain these signs in serviceable and readable condition. Do at least one survey at a popular location (Crystal Lake) to determine if the people surveyed can list what is presented at the kiosks and park signage.

#1-6, Distribute Pet Waste Brochures with Dog Licenses & Increase Signage at Parks – (BMP Completed)

Current Status: There are signs for "No Fouling By Pet Waste" erected at the entrances of the urban ponds and also at City Parks. These signs reference the City ordinance that enforces this law.

Last year 10,500 brochures were mailed to all registered dog owners within the City of Manchester. There are 1,2000 brochures remaining. The clerks give out these brochures to all newly registered dog owners, or walk-ins that are registering a dog for the first time. Once these brochures are exhausted, a new supply will be provided to the City Clerk's office.

BMP Effectiveness Evaluation: We have fielded several calls in regards to this brochure. Many were positive, but some stated that we should clean up all our Combined Sewer Overflow (CSO) discharges before worrying about the dog waste.

During our summer survey of the riverbanks and annual sampling of CSOs along the river we have found infrequent incidents of animal waste left behind by the owners.

Future Goals: To keep residents informed in regards to their obligations handling their pet waste. Resupply the City Clerks office with brochures. To perform continuing visual observations for problem areas when we do our field investigations. To target kennels and animal shelters for compliance with pet waste disposal practices.

ATTACHMENT A

Storm Water Web Site Evaluations

<http://www.asist.net/site/links/city.htm> - Is a site with example Storm Water databases. The rating system is for 0 being the worst it could be to 5 being extremely good.

City Name	Site Rating	Informational Rating
Albuquerque, NM	2	4
Colorado Springs, CO	1	4.5
Birmingham, AL	3.5	2
Huntsville, AL	2	1.5
Phoenix, AZ	2	1.5
Tempe, AZ	1.5	1
Berkley, CA	2	1
Sacramento, CA	4	4
San Diego, CA	4	4
San Diego County, CA	4	4
San Joaquin, CA	3	3
Santa Monica, CA	4	0
Denver, CO	3	1
Jacksonville, FL	4	0
Orlando, FL	5	2
Lodi, CA	3	3
Los Angeles, CA	4	5
Los Angeles County, CA	4	4.5
Manchester, NH	4	4
Orange County, CA	4	4
Placer County, CA	3	2
Pleasanton, CA	3	0
Roseville, CA	4	4
San Antonio, TX	2	4
Willington, VT	1	1
Tallahassee, FL	2	2
Venice, FL	1	1
Metro Atlanta, GA	4	4
Griffin, GA	3	3
Boise, ID	5	3
Bowling Green, KY	5	2

ATTACHMENT B

Organization Name: Environmental Protection Division (EPD)

Project Title: Manchester Urban Ponds Water Quality Monitoring and Restoration Program

Address: 300 Winston Street, Manchester, NH 03103

Project Contact: Rick Cantu – phone: (603) 624-6513, fax: (603) 638-6234 e-mail: rcantu@manchesternh.gov
Jen Drociak – phone: (603) 647-1826, fax: (603) 271-7894, e-mail: jdrociak@des.state.nh.us

Dollar Amount Requested from EPA: \$20,000 (To be distributed among the six urban ponds currently reviewed within the Urban Ponds Restoration Program. Sampling & analytical equipment will be purchased for the PIPES and CLPA. These ponds are monitored under the guidance of the NHDES VLAP).

Dollar Amount of Matching Funds: \$4,000 (20% provided by EPD Supplemental Environmental Program)

Dollar Amount of Total Project Budget: \$24,000

List of Organizations Partnering on the Project: Crystal Lake Preservation Association (CLPA), Pine Island Pond Environmental Society (PIPES), Doors Pond Preservation Society (DPPS), City of Manchester Conservation Commission (MCC), City of Manchester Environmental Protection Division (EPD) and the New Hampshire Department of Environmental Services (NHDES).

Project Summary Information

A. Three urban pond organizations exist in Manchester. The City has been the driving force in data collection, analysis, review and preparing reports for these ponds over the past six years. Manchester seeks this grant to turn over the stewardship of these ponds to the above named organizations. The groups vary in the stage of organizational growth and ability to assume the full responsibility for continuing the monitoring of their respective ponds. The organizations will be trained in water quality sampling technique, native and exotic plant identification, nutrient impacts, awareness of suspect runoff and discharges, pollution prevention measures and water quality measures that can be taken around their homes. These groups will assume the overall stewardship of their ponds. Owner/abutters will be educated on actions they can take in maintaining and improving the existing water quality of their ponds. The current state of these ponds is listed on the below websites:

<http://www.manchesternh.gov/CityGov/dpw/EPD/SEPP/Pond/Crystal.html>

<http://www.manchesternh.gov/CityGov/dpw/EPD/SEPP/Pond/Dorrs.html>

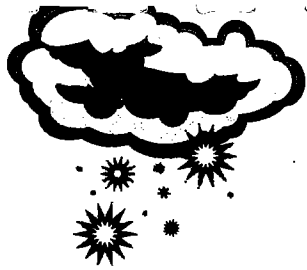
<http://www.manchesternh.gov/CityGov/dpw/EPD/SEPP/Pond/PineIsland.html>

These ponds are in southwest corner, southeast corner and northern fringes of the Manchester Urban Compact area. These bodies of water reflect the impact of recreational/residential use (Crystal Lake); industrial use and airport runway impacts (Pine Island Pond) and commercial/strip mall use (Dorrs Pond).

B. The primary target program is the water quality monitoring and analyses. The grant will support the cost of analysis by the NHDES Laboratory Services lab, the purchase of sampling and field test kits and neighborhood outreach. This data-gathering step is critical to determine water quality trends over time, plan and implement best management practices and restoration projects

Outreach is a component of educating the citizens who abut the ponds. The residents will receive information by newsletter, website, e-mail distribution lists, community access television, etc. of meetings, clean up activities, restoration opportunities and the general health of their ponds. Outreach will be provided through the website and also press releases.

The anticipated measurable results will be increased association participation, improved water quality, a reduction in invasive species, visible small embankment restoration, a chronology of analytical test results and transfer from a public overseen project to a resident neighborhood project.



Storm Water Hotline

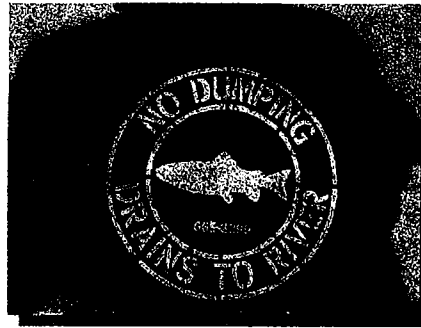
(603) 665-6899

The Storm Water Hotline is an emergency phone line when you cannot contact anyone at the Highway or EPD offices. This phone line is mainly used on nights and on weekends. Call the other contact numbers found on this brochure first if your complaint is during normal business hours.

Inform us if you see any construction activity that allows dirt to flow into storm drains, rivers or wetlands. If you see piles of trash, demolition debris or other suspicious materials piled at construction sites give us a call.

If you believe something doesn't seem right at a construction site call and discuss it with us. We will investigate and determine if a violation is taking place.

We rely on your eyes and input, as it is impossible for us to be everywhere at once. We are always receptive to your concerns and issues.



These two symbols will start showing up in your neighborhoods near the catch basins and storm drains.

Whatever you put into these structures goes directly to the Merrimack River.

They are only meant to collect rain and sand. If you keep these clean, you keep the river clean.



ATTACHMENT C



Storm Water Management Updates

Department of Highways

Storm Water Coordinator

Rick Cantu

Phone: 603-624-6513

Hotline: 603-665-6899

Fax: 603-628-6234

Highway Tel: 603-624-6444

BMP #2 Public Participation

#2-1, Comply with State Public Notification Laws - (BMP Ongoing)

Current Status: The City of Manchester continues to comply with all Public Notification Laws through the development of the Storm Water Management Program process. The meetings that EPD scheduled in the early stages of ordinance development, with the Planning Board and the Department of Public Works, Highway Commission, were announced on the weekly agenda for those perspective meetings, posted at City Hall and DPW, and posted on the City's website.

Included at the end of this section is a copy of the Storm Water Ordinance public notification (Attachment D) as announced in the local newspaper.

Manchester also took an additional step beyond the minimum requirements and notified developers, contractors and engineering firms that usually do business within the City. A copy of the public notification brochure that went to these companies is included as Attachment E. Also included as Attachment F is the mailing list for those who directly received the brochure via mail.

The City of Manchester has a guide that all departments, boards, committees and the Mayor and Aldermen must abide by. It references the rules on Meetings, the Formation of Committees, Rules for Ordinances, Resolutions and Orders, Access to Public Records and Meetings, and Minutes and Records Available for Public Inspection. These Rules comply with the State of New Hampshire Public Notification Laws as outlined in RSA 47:6, and RSA 91-A:1 through RSA 91-A:6. This guidebook is available in all departments for reference should questions arise in regards to the implementation of Public Notice Law regulations.

Future Goals: A Storm Water Ordinance and supporting Regulations have been finalized via the internal City and public hearing processes. The public hearing was conducted, comments received and a final draft completed. During this reporting year the goal will be to implement the Ordinance with supporting Regulations.

#2-2, Hold Annual Household Hazardous Waste Day

Current Status: The City of Manchester held two Household Hazardous Waste Days in Manchester during 2005. These dates have always fallen on the second Saturday of May and the second Saturday of October. The first collection was held on May 14, 2005 and the second was held on October 8, 2005. The date of collection is mentioned on the City's website, announced on flyers at Public Works and various other kiosks throughout the City and also announced in the newspaper the week of the collection. The following material amounts were collected during the 2005-reporting year.

Spring Haz-waste clean up – Hazardous materials consisting of the following components: Waste Oxidizing Liquid, Waste Caustic Alkali Liquids, Waste Corrosive Liquids, Pesticides Liquid, Pesticides Solid, Mercury Waste, Non-RCRA, Non-regulated Hazardous Waste, Solid, Non-RCRA, Non-regulated Hazardous Waste, Liquid.

Total Collected - 3,350 Pounds

Waste Oil Collected – 330 Gallons

Fall Haz-waste clean up – Hazardous materials consisting of the following components: Waste Oxidizing Liquid, Waste Caustic Alkali Liquids, Waste Corrosive Liquids, Pesticides Liquid, Pesticides Solid, Mercury Waste, Non-RCRA, Non-regulated Hazardous Waste, Solid, Non-RCRA, Non-regulated Hazardous Waste, Liquid.

Total Collected - 4,350 Pounds

Waste Oil Collected – 110 Gallons

During the course of the 2005 reporting year, Manchester also collected 39.71 tons of universal waste (consisting mainly of TVs, CRTs and computer peripherals).

BMP Effectiveness Evaluation: This has been one of the more successful programs conducted semi-annually throughout Manchester. There are still remote areas within Manchester that serve as illegal drop-off sites for citizens that refuse to make the effort to travel to the recycling center. The program's success is evident when any citizen brings their waste to the drop off center and witnesses the vast piles of refuse the City collects on a continual basis.

The City notifies all residents who receive a sewer bill regarding the pick up of yard waste and spring clean ups. This notification should help in the prevention of people dumping leaves and grass-clippings along roadsides and brooks and help reduce nutrients that move into the Merrimack River from the tributary streams. A copy of this notification is included as Attachment G.

Future Goals: Manchester expects to hold two haz-waste collection days during the 2006 calendar year. One on May 13th and the other October 14th.

#2-3, Continue Regular Used Oil, Battery and Tire Collection – (BMP Ongoing)

Current Status: The City collected 64.29 tons of tires, 1,660 gallons of used oil and 4.5 tons of used automotive batteries during the 2005 calendar year. This was in addition to the materials collected on the haz-waste collection days listed above.

Future Goals: Continue the same level of accessibility and collection hours as currently established.

#2-4, Continue Urban Forestation through “Green Streets” Program

Current Status: The City of Manchester, through the Parks and Recreation “Green Streets Program,” sold and installed 128 trees during the calendar year of 2005. There were two fewer trees planted this year than in the previous year.

Future Goals: To continue the program as currently established. Assure the public is aware of the availability of this service through the City of Manchester.

#2-5, Publicize & Maintain Stormwater & Combined Sewer Hotline

Current Status: The City established the Storm Water / CSO Hotline on August 26, 2003. The phone number is (603) 665-6899. The City previously sent envelope stuffers with the 23,700 bills (residential, commercial and industrial customers) informing these users of the storm water hotline and how it can be used to address environmental concerns. This notice will be provided again this year over the period of mid-July through late November (over the course of the 11-week billing cycle – see BMP #1-4).

The hotline number is also provided on the City’s storm water website.

BMP Effectiveness Evaluation: This BMP is effective after initial receipt of the notice. However, as weeks pass, the residents tend to lose the information and inquire with issues to other departments (i.e. police, fire for basement flooding, highway dispatch etc). After that period, the calls drop off dramatically until there are probably only one or two calls every month. There is still the misconception that the hotline is to be used for flooding issues during periods of heavy rains. This is outside the intended use for the storm water hotline for erosion complaints.

Future Goals: Mention the storm water hotline number on each of the three separate mailings that are going to the residents over the course of this year. To continue to advertise the hotline at every opportunity.



ATTACHMENT D

CITY OF MANCHESTER

Office of the City Clerk



Leo R. Bernier
City Clerk

Carol A. Johnson
Deputy City Clerk

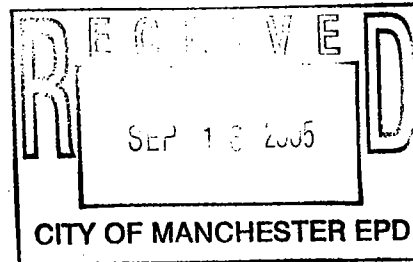
Paula L-Kang
Deputy Clerk
Administrative Services

Matthew Normand
Deputy Clerk
Licensing & Facilities

Patricia Piecuch
Deputy Clerk
Financial Administration

September 13, 2005

Union Leader Corporation
Attention: Rosa Gonzalez
P. O. Box 9555
Manchester, NH 03108-9555



Dear Ms. Gonzalez:

Enclosed is a Legal Notice to be published in *The Union Leader* on Friday, September 16, 2005.

Should you have any questions, please do not hesitate to contact me at 624-6480.

Sincerely,

Paula L-Kang
Deputy Clerk

Enclosures

ATTACHMENT D

LEGAL NOTICE

CITY OF MANCHESTER, NH

A Public Hearing will be held on Tuesday, October 4, 2005 at 5:30 PM in the Aldermanic Chambers of City Hall, One City Hall Plaza, Manchester, New Hampshire for the purpose of hearing those wishing to speak for or against the following ordinance amendment:

“Amending the Code of Ordinances of the City of Manchester by adding a new Chapter 54: Storm Water to Title V: Public Works.”

Copies of the proposed Ordinance Amendment is available for viewing at the Office of the City Clerk (east wing), One City Hall Plaza, Manchester, New Hampshire.

s/Leo R. Bernier
City Clerk

ESQUIRE, First Justice of said Court, this day, September 7, 2005.

John R. Buonomo
Register of Probate

(UL — Sept. 16, 23, 30)

Legal Notice ✓

CITY OF MANCHESTER

The following regulations governing standing, stopping and parking, as approved by the Committee on Traffic/Public Safety, in accordance with the provisions of Chapter 335 of the Sessions Laws of 1951 and the Ordinances of the City of Manchester were adopted at a meeting of the Board of Mayor and Aldermen held on September 6, 2005 as follows:

Section 70.36 Stopping, Stand, or Parking Prohibited

STOP SIGNS:

On Janet Court at Mooresville Road (NWC).

NO PARKING:

On Beech Street, east side, from Webster Street to a point 205 feet north

On Lincoln Street, west side, from Valley Street to a point 400 feet north.

On Lincoln Street, east side, from Valley Street to Auburn Street.

On Villa Street, south side, from a point 25 feet east of Belmont Street to a point 35 feet east.

RESCIND STOP SIGNS:

On Lincoln Street at Valley Street (NWC, SEC).

RESCIND NO PARKING:

On Lincoln Street, west side, from a point 300 feet north of Valley Street to a point 105 feet north (ORD. #8071).

On Lincoln Street, east side, from Summer Street to Valley Street (ORD. #3234).

REPEALING PROVISIONS

That all rules and regulations now in effect in accordance with the provisions of an Ordinance "Chapter 70 Motor Vehicles and Traffic" as adopted August 6, 2002, with subsequent amendments thereto and inconsistent with the traffic rules and regulations herein adopted, be repealed.

s/Leo R. Bernier, City Clerk

(UL — Sept. 16)

Legal Notice ✓

CITY OF MANCHESTER, NH

A Public Hearing will be held on Tuesday, October 4, 2005 at 5:30 PM in the Aldermanic Chambers of City Hall, One City Hall Plaza, Manchester, New Hampshire for the purpose of hearing those wishing to speak for or against the following ordinance amendment:

"Amending the Code of Ordinances of the City of Manchester by adding a new Chapter 54: Storm Water to Title V: Public Works."

Copies of the proposed Ordinance Amendment is available for viewing at the Office of the City Clerk (east wing), One City Hall Plaza, Manchester, New Hampshire.

s/Leo R. Bernier
City Clerk

(UL — Sept. 16)

Legal Notice

The Town of South Berwick, Maine is requesting bids for one new diesel pickup truck meeting the specifications listed on page two of the bid form. All bids must be accompanied by a manufacturers specification sheet for the entire vehicle. Bids will be accepted until 10 a.m. on Sept. 28, 2005 at which time they will be publicly opened and read. To receive bid form call PWD, Terry Oliver 207-384-3300.

(UL — Sept. 15, 16, 17)

Legal Notice ✓

CITY OF MANCHESTER, NH

The Board of Mayor and Aldermen of the City of Manchester, NH adopted the following Ordinance at a meeting held on September 6, 2005:

"Amending Section 33.026 (WWTP Operator Trainee) of the Code of Ordinances of the City of Manchester."

s/Leo R. Bernier
City Clerk

2005.

For additional information, call 1-800-852-3345, ext. 6891.

EQUAL OPPORTUNITY EMPLOYER
(UL — Sept. 15, 16, 18)

Legal Notice ✓

CITY OF MANCHESTER, NH

The Board of Mayor and Aldermen of the City of Manchester, NH will be considering the following Ordinances at a meeting to be held on October 4, 2005:

Amending Chapter 30: City Officials and Employees of the Code of Ordinances of the City of Manchester by adding §30.49 Office of Independent City Auditor and §30.50 Duties of Independent City Auditor.

Amending Sections 36.15 Issuance of Warrant for Collection; Notice to City Auditor and 36.17 Abatement Before Payment of the Code of Ordinances of the City of Manchester by replacing the term City Auditor with the term Independent City Auditor and Finance Office.

Amending Sections 36.16 Records and Reports of Abatements, 36.18 Abatement After Payment, and 36.35 Special Account for Taxes and Assessments of the Code of Ordinances of the City of Manchester by replacing the term City Auditor with the term Finance Office.

Repealing Sections 35.107 (Y, Z, AA, AB and AC) Duties of Finance Officer and 35.018 Audit of the Code of Ordinances of the City of Manchester.

Amending Chapter 32, Conservation Commission, Section 32.092 Composition; Terms, of the Code of Ordinances of the City of Manchester.

Amending Section 33.025 (Community Health Nurse) of the Code of Ordinances of the City of Manchester.

Amending Chapter 70: Motor Vehicles and Traffic of the Code of Ordinances of the City of Manchester by amending Section 70.40 Towing by increasing the towing fees.

Amending the Code of Ordinances of the City of Manchester by creating a new section within Chapter 111: Amusements establishing regulations for noise activities conducted in outdoor concert venues throughout the city and inserting new penalties in Section 111.99: Penalty to enforce these regulations.

Amending Chapter 115: Solicitations, Sales, Peddlers, and Fairs of the Code of Ordinances of the City of Manchester by inserting new definitions and application requirements.

Authorizing the Mayor to Dispose of Certain Tax Deeded Property Known as West Haven Road, Map 0922/Lot 0039-A.

s/Leo R. Bernier, City Clerk

(UL — Sept. 16)

Legal Notice

Request For Quotations Chemical Root Control Services Town of Derry, New Hampshire Fall 2005

The Town of Derry, New Hampshire Department of Public Works, Sewer Division, is requesting quotes for the application of licensed root control agents to approximately 5000 linear ft of 8 inch diameter main line sanitary sewers in order to kill root growth present in the lines and to inhibit root growth without permanently damaging the vegetation producing the roots.

Quotes are to be submitted to the Town of Derry, New Hampshire, Department of Public Works, Sewer Division, Municipal Center, 14 Manning Street, 2nd Floor, Derry, New Hampshire 03038, attention Thomas A. Carrier, Superintendent, on or before September 30, 2005.

Bidder information is available by contacting the Derry Department of Public Works, 14 Manning Street, Derry, NH 03038 or by calling 603-432-6147.

(UL—Sept. 14, 15, 16)

Legal Notice

THE STATE OF NEW HAMPSHIRE

Northern District of

Hillsborough County

300 Chestnut Street

Manchester, NH 03101 2490

603 669-7410

qualified to be entered at or before the time a bid is offered. The successful bidder(s) will be required to execute a purchase and sale agreement immediately after the close of the bidding. The balance of the purchase price shall be paid within thirty (30) days from the sale date in the form of a certified check, bank treasurer's check or other check satisfactory to Mortgagee's attorney. The Mortgagee reserves the right to bid at the sale, to reject any and all bids, to continue the sale and to amend the terms of the sale by written or oral announcement made before or during the foreclosure sale. The description of the premises contained in said mortgage shall control in the event of an error in this publication.

Dated at Manchester, New Hampshire, on September 9, 2005.

MORTGAGE ELECTRONIC
REGISTRATION SYSTEMS, INC.

By its Attorneys,

HARMON LAW OFFICES, P.C.

Kristin A. Hedvig, Esquire

78 West Merrimack Street
Manchester, NH 03101

(603) 669-7963

(UL — Sept. 16, 23, 30)

Legal Notice

MORTGAGEE'S NOTICE OF SALE OF REAL PROPERTY

By virtue of a Power of Sale contained in a certain mortgage given by Aaron M. Centrella and Rebecca A. Centrella ("the Mortgagors") to Option One Mortgage Corporation, dated September 15, 2004 and recorded with the Belknap County Registry of Deeds at Book 2090, Page 467 (the "Mortgage"), which mortgage is held by Option One Mortgage Corporation, the present holder of said Mortgage, pursuant to and in execution of said power and for breach of conditions of said Mortgage and for the purposes of foreclosing the same will sell at:

Public Auction

on

Monday, October 10, 2005

at

3:00 p.m.

Said sale being located on the mortgaged premises and having a present address of 9 Leisure Drive, Gilford, Belknap County, New Hampshire. The premises are more particularly described in the Mortgage.

For mortgagors' title see deed recorded with the Belknap County Registry of Deeds in Book 1831, Page 949.

NOTICE

PURSUANT TO NEW HAMPSHIRE RSA 479:25, YOU ARE HEREBY NOTIFIED THAT YOU HAVE A RIGHT TO PETITION THE SUPERIOR COURT FOR THE COUNTY IN WHICH THE MORTGAGED PREMISES ARE SITUATED, WITH SERVICE UPON THE MORTGAGEE, AND UPON SUCH BOND AS THE COURT MAY REQUIRE TO ENJOIN THE SCHEDULED FORECLOSURE SALE.

The Property will be sold subject to all unpaid real estate taxes and all other liens and encumbrances which may be entitled to precedence over the Mortgage. Notwithstanding any title information contained in this notice, the Mortgagee expressly disclaims any representations as to the state of the title to the Property involved as of the date of the notice of the date of sale. The property to be sold at the sale is "AS IS WHERE IS".

TERMS OF SALE

A deposit of Five Thousand (\$5,000.00) Dollars in the form of a certified check or bank treasurer's check or other check satisfactory to Mortgagee's attorney will be required to be delivered at or before the time a bid is offered. The successful bidder(s) will be required to execute a purchase and sale agreement immediately after the close of the bidding. The balance of the purchase price shall be paid within thirty (30) days from the sale date in the form of a certified check, bank treasurer's check or other check satisfactory to Mortgagee's attorney. The Mortgagee reserves the right to bid at the sale, to reject any and all bids, to continue the sale and to amend the terms of the sale by written or oral announcement made before or during the foreclosure sale. The description of the premises contained in said mortgage shall control in the event of an error in this publication.

Dated at Manchester, New Hampshire, on September 9, 2005.

ATTACHMENT E

STAKEHOLDER INPUT

(Owner/Operator/Developer/Contractor)

The Storm Water Ordinance and Rules & Regulations are in the last phase of the adoption process. This is the public's opportunity to review the documents and to provide comment at the public hearing scheduled for Tuesday, October 4, 2005 in the Aldermanic Chambers at City Hall.

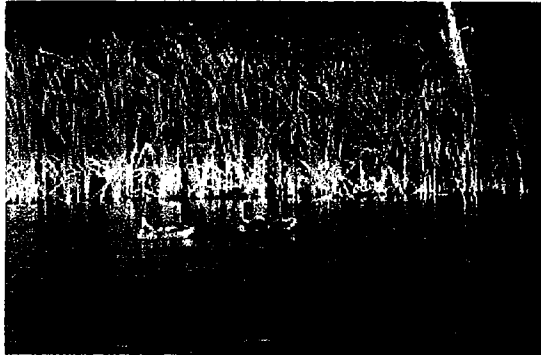
Property owners who plan to develop their land, operator/contractors who perform the site activity and developers who design plans will all be impacted by the implementation of this ordinance.

The Storm Water regulations are already in place at the National EPA level with required implementation by the Phase II communities.

This will be your chance to comment on the content and intent of both the Storm Water Ordinance and the Storm Water Rules & Regulations before the City formally adopts them and they are enforced accordingly.

These documents may be viewed on the City's website at:

<http://www.manchesternh.gov/CityGov/dpw/EPD/stormwater/home.html>



Storm water threatens natural habitats.

For questions on the public hearing content, call:

**Environmental Protection Division
Rick Cantu, Environmental Permits
Coordinator**

Phone: 603-624-6513

Cell: 603-765-0320

Fax: 603-628-6234

CITY OF MANCHESTER



**STORM WATER
ORDINANCE
PUBLIC HEARING**

***Tuesday, October 4, 2005
5:30 PM***

***Aldermanic Chambers
City Hall, One City Hall Plaza***

ATTACHMENT F

Name	Address	City/State	Zip
Windsor Industries Corp	P.O. Box 250 24 Wright Ave	Merrimack NH	03054
Metcalf & Eddy	701 Edgewater Rd	Wakefield, MA	01880
CEI Environmental	64 Dilla St	Milford, MA	01757
HTA, Inc	150 Dow St	Manchester, NH	03101
Teton Environmental	263 Wilson Crossing Rd	Auburn, NH	03032
Waterford Development Corp.	175 Highland Ave	Needham, MA	02494
Kelly Construction, Co. Inc	750 E. Industrial Park Dr.	Manchester, NH	03109
Jewett ConstructionCo. Onc	32 Harriman Hill Rd	Raymond, NH	03077
JGE Enterprises, Inc	24 Eastman Ave	Bedford, NH	03110
Hutter Construction, Corp	810 Turnpike Rd	New Ispwich, NH	03071
Englewood Construction, Corp	15 Harvey Rd	Bedford, NH	03110
Eclipse Construction, Inc	19 Harvey Rd	Bedford, NH	03110
Eames Corporation	633 Mast Rd	Goffstown, NH	03045
Maple-Leaf Construction Co. Inc.	5 Congress St.	Nashua, NH	03062
Continental Paving, Inc	1 Continental Dr	Londonderry, NH	03053
A.W. Rose Construction, LLC	33 South Commercial St	Manchester, NH	03101
T.F. Moran	554 Union St	Manchester, NH	03101
Harry Wetherbee	358 Quaker Dr	Weare, NH	03281
Turner Group Engineers	27 Locke Rd	Concord, NH	03301
VHB Engineering	Kilton Rd	Bedford, NH	03110
Nobis Engineering	18 Chenell Dr	Concord, NH	03301
Haley & Aldrich, Inc	340 Granite St	Manchester, NH	03101
GZA Environmental	380 Harvey Rd	Manchester, NH	03103
Dufresne- Henry Engineers	175 Canal St	Manchester, NH	03101
CPI Environmental Services	Route 106	Belmont, NH	03220
CDM Engineers	1001 Elm St.	Manchester, NH	03101
Aries Engineering	46 South Main St	Concord, NH	03302
Wright-Pierce	99 Main St	Topsham, ME	04086
Woodward & Curan, Inc	41 Hutchins Dr.	Portland, ME	04102
R.H. White ConstructionCo. Inc	41 Central St	Auburn, MA	01501
Lamontagne Builders, Inc	317 South River Rd	Bedford, NH	03110
Pichette Bros Construction	714 Rimmon Rd	Manchester, NH	03102
ProCon Construction	1359 DW Highway	Hooksett, NH	03106
RJC General Contractors	905 Mammoth Rd	Manchester, NH	03103
Sierra Development	251 Rockingham Rd	Auburn, NH	03032
Thibeault Corporation of NH	603 Mammoth Rd	Londonderry, NH	03053
White Birch Construction	224 Spruce St.	Manchester, NH	03101
Twine Construction, LLC	12 Highland Farms Dr	Bedford, NH	03110

**YARD WASTE NOTICE FOR
MANCHESTER RESIDENTS
2006 YARD WASTE
CURBSIDE PICKUP
SCHEDULE**

ATTACHMENT G

SPRING CLEANUP!!!

April 10 through May 19

-WEEKLY PICKUP-

SAME DAY AS USUAL RECYCLING PICKUP DAY

MID-SEASON!!!

May 22 through October 20

- EVERY OTHER WEEK PICKUP-

SAME DAY AS USUAL RECYCLING PICKUP DAY

FALL CLEANUP!!!

October 23 through December 1

-WEEKLY PICKUP-

SAME DAY AS USUAL RECYCLING PICKUP DAY

CHRISTMAS TREE PICKUP

JANUARY 1 through JANUARY 12

-WEEKLY PICKUP-

SAME DAY AS USUAL RECYCLING PICKUP DAY

The City of Manchester provides its residents with the convenient "**Dunbarton Road Recycling Center**" for the drop off of yard waste and recyclables. The center will be opened Monday through Friday, 7:30 a.m. - 3:00 p.m. and the first and third Saturday of each month 7:00 a.m. - 11:30 a.m. Call 413-6799 for additional information.

*HOLIDAY WEEKS ONE DAY DELAY if your scheduled pickup is ON or AFTER the Holiday!

Corcoran Environmental Services, Inc

67-1 West Merrimack Street
Manchester, NH 03101

Corporate Offices

9 High Street
Kennebunk, ME 04094

For all service related inquiries
please contact us at **1-603-413-6799**




City of Manchester
Yard Waste
Collection Routes





Manchester's Yard Waste Collection Begins April 10th

Spring Clean-Up: April 10th - May 19th

- WEEKLY yard waste collection for all residents
- Collection occurs on the SAME DAY as your trash & recycling
- Must be placed curbside by 7:00 am

Mid-Season: May 22nd - October 20th

- BI-WEEKLY yard waste collection
- **GREEN** sections begin week of May 22nd
- **RED** sections begin week of May 29th
- Collection occurs every other week, on the SAME DAY as your trash & recycling
- Must be placed curbside by 7:00 am

Fall Clean-Up: October 23rd - December 1st

- WEEKLY yard waste collection for all residents
- Collection occurs on the SAME DAY as your trash & recycling
- Must be placed curbside by 7:00 am

**Remember: Manchester now recycles EVERY WEEK
on the SAME DAY as your trash collection**

- Detailed yard waste information available at www.ManchesterNH.gov -
 Go to the Recycling page found on the "Services" tab, and click on Yard Waste



NEWSPAPER ADVERTISEMENT IN THE MANCHESTER UNION LEADER
CORRESPONDS WITH THE YARD WASTE MAILER FOR CURBSIDE SCHEDULE

ATTACHMENT G

BMP #3 Illicit Discharge Detection and Elimination

#3-1, Develop & Present Draft Storm Sewer Ordinance – (BMP Completed)

Current Status: The City staff, after several internal reviews, held a public hearing on the Storm Water Ordinance. This meeting was held October 4, 2005. The transcript of that meeting is included as Attached H.

A concerned Developer was present at the meeting and voiced concerns. We also received comments from a private citizen and addressed these. Thelma Murphy, of the EPA, also provided comments and Manchester incorporated the suggestion into the updated Ordinance. Copies of the comments received are included as Attachment I, J and K, respectively.

There have been issues with conflict of EPA regulations stating that only an Ordinance or a similar regulatory mechanism (but not both) could be used to enforce storm water protections. This issue has since been cleared with the EPA that both documents are appropriate if a municipality decides to go that route.

The New Hampshire Municipal Association (NHMA) commented on Goffstown's Ordinance and stated that they didn't believe there was enabling legislation on the State level to have a legally binding storm water ordinance. In a follow up letter from the NHMA, they stated that a municipality was given broad enough powers from the State of New Hampshire to develop and implement a Storm Water Ordinance. The NHMA cautioned in regards to the language regarding the enforcement of the Ordinance. The NHMA recommends that towns review the language concerning enforcement authority and assure that it does not conflict with other departments (zoning, planning, health etc.).

BMP Effectiveness Evaluation: Until the ordinance is adopted the BMP is ineffective. We have had a few issues come up that, due to the lack of an Ordinance, the storm water program could not enforce regulations in regards to obvious violations.

Future Goals: The previous goal was to have the Ordinance and Regulations adopted by August 1, 2005. This did not happen. Currently, we are hoping to have the 'Bills on Second Reading' by May with adoption of the Ordinance in June or July of 2006. We would then allow public comment on the Regulations and adopt these shortly after the public comment was received and incorporated to the extent practicable.

#3-2, Continue Dry Weather Screening of Outfalls – (BMP Completed)

Current Status: This is the most improved BMP of this annual report. Last year we were concerned that this BMP wasn't getting the attention required. Over 2005 all the outfalls along the Merrimack River were inspected twice (once by the State of New Hampshire Department of Environmental Services [NHDES] and once by the City). The NHDES took coliform samples of discharging outfalls during their dry weather inspections. The City followed up on these reports by going back and reinspecting and

resampling these locations. The City further made a determination of possible sources of the coliform bacteria found. The NHDES findings, (Attachment L), is included at the end of this section.

The Piscataquog River was inspected once by the NHDES and the City did a follow-up review on the areas cited in the NHDES report. The City did not complete the entire Piscataquog River within the border of Manchester.

All the urban ponds were reviewed for illicit discharges with coliform samples being taken in suspect areas once during the 2005 reporting year.

The State's GPS locations were verified during the City's follow up and the picture log from the state was matched to that of the City. These were filed for future reference.

BMP Effectiveness Evaluation: This task has been very effective this year. All pipes found along both sides of the Merrimack River and problem areas of the Piscataquog have been noted, pictures taken and logged. Follow up was done on the NHDES findings (Attachment M). The BMP required two inspections over a five-year period. This was done over this past reporting year.

The success of the urban pond detection of pollutants of concern can be reviewed in the City's annual Urban Pond report or by visiting the urban pond website at: <http://www.manchesternh.gov/CityGov/DPW/EPD/SEPP/Pond/Home.html> This site outlines the sampling performed at the ponds over the past five years in association with Urban Ponds Program.

Future Goals: The City plans to do another complete survey of both rivers and the urban ponds during the low flow season of August or September of 2006. The initial survey was done in 2000 and included in the Malcolm-Pirnie report. It has been difficult at times to match up the coordinates of their outfall findings with what we have encountered in the field. There have been places where they have noted one pipe, and we have found three. I have included an example log (Attachment N) from our findings as we have made an attempt to match up our findings with the initial report. Note that some of the Malcolm-Pirnie PPO numbering system have an additional (a) and sometimes a (b) designation associated with the designated pipe. This is due to Manchester finding more than one pipe in that location.

The goal for the next two years of the five-year program will be to assign a number, accompanying reference picture and GPS location to each outfall found along both rivers. We will also assign a brief description to each finding. This way there will be no confusion when future inspectors do pipe inspections along these rivers. The pictures will be linked to the new reference numbers for verification purposes.

The urban ponds will be inspected during the 2006 reporting year and sampled as necessary. The drains will be cataloged in each Urban Pond file folder with findings, coordinates and pictures.

#3-3, Develop and Implement System for Detection & Elimination of Illicit Discharges – (BMP Completed)

Current Status: This program was developed and submitted with the year one report. The program is a good baseline document for detecting illicit discharges. The document has not been updated or changed.

BMP Effectiveness Evaluation: This BMP is effective in providing guidance when trying to determine the source of an illicit discharge.

At the end of this section is a report on how an illicit discharge, discovered by the City of Manchester's Health Department (Attachment O) was tracked down and rectified. The process that was used to track down and illicit discharge was similar to those outlined in the Illicit Discharge Manual and this report is included as Attachment P.

Future Goals: Our goal is to continue aggressively responding to illicit discharges as they are found. Also, the City wants to continue to monitor the outfalls as outlined in BMP #3-2, for any illicit discharge connection.

Over this year the City will also review the guidance manual developed by the 'Center for Watershed Protection' that was provided by the EPA in August 2005. These recommendations will be compared to the current program. The program will be modified to incorporate procedures into our current Illicit Discharge Program.

#3-4, Map Outfalls and Receiving Waters – (BMP Completed)

Current Status: The City had CDM map the outfalls from the Malcolm-Pirnie findings in early 2001. CDM has developed an extensive GIS mapping system for the City to include both sewage and drainage systems. This mapping has been extended to include tax maps, and City assessing information and water department infrastructure.

Once annually, the City commissions CDM to input all the new growth and City sewer extension updates into the GIS and make it a dynamic mapping system rather than a dated static system. The City's engineering department will load information from city repairs within the collection system. Errors to the present system that are found in the field are also modified within the GIS.

BMP Effectiveness Evaluation: This tool has proved invaluable to our Storm Water Management Program. It is being used to track cleaning of lines, location of baffle tanks, sectioning off catch basin cleaning areas and for review to determine potential locations for illicit discharges.

Future Goals: The City wants to continue development of the GIS system use. Aerial Ortho photos were used to determine a tree count before an extensive cutting took place. In last year's annual report, the City wanted to develop a protocol for entering information on the GIS. This has been completed and is included as Attachment Q at the end of this section.

ATTACHMENT H

10/04/2005 Special BMA (PH-Storm Water Ordinance)

1

**SPECIAL MEETING
BOARD OF MAYOR AND ALDERMEN
(PUBLIC HEARING – STORM WATER ORDINANCE)**

October 4, 2005

5:30 PM

Mayor Baines called the meeting to order.

Mayor Baines called for the Pledge of Allegiance, this function being led by Alderman Shea.

A moment of silent prayer was observed.

The Clerk called the roll.

Present: Aldermen Roy, Gatsas (late), Guinta (late), Sysyn, Osborne, Porter,
O'Neil (late), Lopez, Shea, DeVries (late), Garrity, Smith, Thibault and Forest

Mayor Baines advised that the purpose of the special meeting is to hear those wishing to speak in favor of or in opposition to a proposed ordinance amendment; that the Clerk will present the proposed ordinance amendment for discussion at which time those wishing to speak in favor will be heard, followed by those wishing to speak in opposition; that anyone wishing to speak must first step to the nearest microphone when recognized and recite his or her name and address in a clear, loud voice for the record, that each person will be given only one opportunity to speak; and any questions must be directed to the Chair.

The Clerk presented the proposed ordinance amendment:

“Amending the Code of Ordinances of the City of Manchester by adding a new Chapter 54: Storm Water to Title V: Public Works.”

Mayor Baines requested that Rick Cantu, Environmental Permits Coordinator, make a presentation.

Rick Cantu, Environmental Permits Coordinator, stated I am the Storm Water Coordinator and Environmental Permits Coordinator. I work with the Storm Water Program. I am going to go through a little presentation here. I will give you some background as to why we are doing this and then we will show you some photographs on what it will help abate down the road and then we can open it up to discussion. On March 10, 2003 the EPA had the Phase II Storm Water Program adopted. This was required of 45 communities in New Hampshire because of the density of population. Manchester submitted their program. This is a copy of

the program here, it is quite an extensive document, with the requirements that we had to accomplish as part of this five-year program. The EPA received the program in late July and then on August 5 they acknowledged receipt of the program and we became officially that NH number. That is our program number. The program has been accepted by the EPA. The EPA expected the adoption of six minimum controls. Those were public education, public participation, illicit discharge detection and elimination, construction site runoff controls, post-construction storm water management and pollution prevention and housekeeping for municipal operations. On your desks I have left some of these. It breaks down everything we had to do. The one that is highlighted in yellow...this is what we are doing now, the ordinance. As you can see it is quite extensive what we had to do as part of this program and it is ongoing. It is not completed yet. Every year we submit a program to the EPA, a report. That sub package that you is #3, the illicit discharges that requires the development of a storm water ordinance. We developed this draft as was required by July 2005. That was completed and the final adoption has to be by July 30, 2006. The ordinance review went through several of the Phase I communities. The Phase I Program is the same as the Phase II Program. The only thing is that it required cities of 100,000 or more in 1990 to adopt this program. Manchester at that time had 96,000 or 97,000 so we fell under that threshold and we didn't have to do that but now we are in Phase II, which is the same as Phase I. So instead of starting from scratch we went through all of the Phase I communities and looked at their ordinances and picked the stuff that was appropriate for Manchester. We looked at the EPA model and then we looked at some of the smaller community's storm water ordinances. That copulation of ordinances we used to develop our draft ordinance that we are presenting here today. We met with the Highway Department's engineering and EPD staff to do internal review of the ordinance and then we met with the Planning Board in the fall of 2003. We brought forth the idea of this dovetailing with their planning and how it was going to work and the earliest draft ordinance, at that time, was quite a large document. We incorporated all of the suggestions from the input. A lot of the attorneys at various seminars and EPA suggested that we do a broad ordinance and focus on the rules and regulations. The rules and regulations are ongoing and growing where the ordinance is kind of locked in place for a period of time and the staff felt that this approach was sound. So we reduced the ordinance to reflect that intent. You have a 10 or 12 page document and then the

rules and regulations, which were the original ordinance were moved over and they are much broader in detail and scope. The two documents were sent out again for internal review and then finalized. The ordinance has 13 sections. Just quickly they are purpose, definitions, administration, prohibited discharges, permit procedures and requirements, general permit provisions, eligibility, waivers, design and management standards, industrial discharges, access and inspections, notification of spills and discharges and violations enforcement and penalties. An example of the ordinance section would be waivers. This is word for word what is being proposed in the ordinance. As you can see it is about a paragraph long. When you go to the rule and regulation that reflects that, you will see under general that is the part of the ordinance and then that is where we put in the conditions for the waiver. Those could change. The EPA could change those. We may find there is something we missed as this program develops. This is fairly new. That gives us the opportunity to work with these and change them as needed. It goes through the different things that are required to get a waiver. Before we go to this I wanted to show some of the things that we see outside every day. This will give you an idea of what we are looking at. These are some of the best management standards. You can see silt fence. If we didn't have this stuff up a lot of the dirt would wash right into the streams and brooks and bogs and things like that. Here you can see it is just an open net that could have potential problems. Here is some more stuff where they abated it. We had some issue with things running in here and asked them to abate that further. Down the side of the street you can see if the construction site is not properly taken care of the water runs off and erodes neighbor's properties. This is dirt that runs down to a local catch basin from a construction site that didn't have proper controls. Here they were doing the project on the I-93 bridge widening and didn't have proper controls and a big ravine washed a lot of dirt out into the street. Here we have a silt fence that failed. It had hay bales but nobody had looked after and they hadn't done the inspections after it rained and a lot of the silt had gone into the Cohas Brook. These are local projects where the upstream area...this was nicely laid and all of the rip wrap and everything was tight. They moved upstream and they didn't have the protection so it moved all of the dirt down so all of the work that was done came to naught. That kind of shows you down lower how that mud travels. Here is another small detention pond on a site. If you are not controlling upstream here you can see that the dirt and sediment starts to move into the pond so the pond becomes useless. Here is

a site where they didn't finish their looming and seeding and with the next rain storm a lot of this stuff would wash off down into the brook. So these are the things that this ordinance will give us the local control to cite the developers and get them working quicker to prevent this from happening. Right now we do inspections but we don't have the authority locally. It is EPA mandated and if we were to call the EPA for them to get out here it could take two, three, four or five months and by that time the project is done and closed and people are living there. That is what the ordinance is here for and I will answer questions if anyone has them.

Alderman Lopez stated I just want to make sure that I am following you correctly here. Ordinances from Page 2 until 11 are what you are speaking of. You are amending the Code of Ordinances by adding a new Chapter 54 Storm Water but when you talk about Storm Water Rules & Regulations, that is already in place or is that what you want to put in place in addition to the ordinance?

Mr. Cantu responded no those are not in place. The ordinance will give us the ability, if you look under administration it will give the Public Works Director the ability to adopt the rules and regulations.

Alderman Lopez asked but if we are looking at the ordinances and of course this is a public hearing here and that is what we are dealing with. We are not dealing with the Storm Water Rules & Regulations is that correct?

Mr. Cantu answered yes that is correct.

Alderman Lopez stated those are something that probably later on could be enacted into an ordinance correct.

Mr. Cantu responded they could but I think you would want to keep them as rules and regulations because they will evolve and change.

Alderman Lopez asked but we are not approving the rules and regulations.

Mr. Cantu answered right.

Alderman Lopez stated I just want to make sure that that is clear in my mind.

Kevin Sheppard, Deputy Public Works Director, stated Section 54.03 under Administration allows the Director of Public Works to institute the rules and regulations per this ordinance. Our plan was to get the ordinance passed, review the rules and regulations and implement them under the authority of the Public Works Director.

Alderman Lopez asked to implement the rules and regulations. But that is a policy isn't it? That is not an ordinance. We are only dealing with ordinances.

Mr. Sheppard answered correct. They are two different things. The ordinance and then the rules and regulations. Tonight we are acting only on the ordinance.

Alderman Shea asked, Kevin, who is going to enforce these particular rules and regulations or ordinances as it were and how are they going to do it.

Mr. Sheppard answered right now we have inspection staff as part of our staff at the Highway Department who go out to construction sites looking at the sewers, the roads and the improvements. This will be part of their work also. There will be a checklist to take a look at storm water prevention measures on the sites. Rick Cantu makes occasional site visits to look at these measures so there are people in place.

Alderman Shea stated let's assume that some of these regulations are not properly followed. I am reading through this. There is upwards of a \$10,000 fine. I realize that but is there a process that is going to be used in order to educate or to instruct or to help out? I mean you are not going to go to a particular site obviously but have you done any of that or is that going to be formulated or are we talking about something to be developed?

Mr. Sheppard responded Rick can probably expand on that a little bit further but we have worked with existing sites. We are not looking to go out there and start fining people. We want to educate people. Rick actually has information on the City's website about this. We are trying to get information out to the engineers and contractors out there to let them know what is going on. I spoke to Rick a little bit earlier and on the first site visit if there is an issue we are going to talk to the contractor and get it fixed. If we go back and it is not fixed maybe...Rick can maybe go through because we have been through this.

Mr. Cantu stated I actually do site inspections now. I fill out a report and if there is something missing or that needs to be worked on I pass it on to the contractor. Right now they comply out of being congenial but we don't have any enforcement powers. They really don't have to comply with our request. I would say that 90% to 95% work with us. There are always the few that say we don't need to listen to you. So this gives us the enforcement power on a local level so it doesn't get way out of hand.

Alderman Shea responded maybe I am just separating this and if I am you can stop me but there are a lot of instances in different areas of the City where people, and this may not concern this at all, are underneath their car changing their oil and doing things of that nature. Does this impact...I know it impacts storm water but is this connected as well to it? Is this going to be enforced as well? This is a problem because there are a lot of people in different areas of the City that are working on their own cars that are draining the oil and the oil is going down into the sewer and so forth. I have had constituents calling me about that particular problem. Is this part and parcel of that as well or is this separate?

Mr. Cantu replied when we get calls we actually try and address that through the industrial pre-treatment program but if they are small private residences and not a commercial industry or anything like that it is in the rules and regulations of the prohibited discharges. There is a whole list that goes from swimming pools to car waste to pesticides. It is pretty much all covered.

Alderman Thibault asked, Kevin, what we are talking about here...if a contractor is going out to build a house he is going to have to go see you people for a permit to do this type of work over there or is there any permit available presently for this type of thing.

Mr. Cantu stated currently this is programmed for anybody who disturbs an acre or more of land. If somebody is disturbing two acres, let's say six houses they are required right now to file an NOI, which is a notice of intent to EPA. They developed the Storm Water Pollution Prevention Plan.

Alderman Thibault asked they have to do that with the City.

Mr. Cantu answered no with the EPA but we have no authority to enforce that. All we are doing is dovetailing that program at the requirement of the EPA to adopt this so there is some local control. If there is an issue what they will do when they submit their NOI with the EPA, we will get a copy. Anything less than one acre will not be covered under this program unless it abuts a stream or a sensitive area.

Alderman Smith asked, Kevin, why do we allow developers to build a detention pond. I think is a big factor in a lot of developments today. You have stagnant water that doesn't move and stuff like that. What is the purpose of allowing them to have a detention pond?

Mr. Sheppard answered we are looking to keep the pre-run off, the same as the post run off, from sites so there is no impact down stream or to abutters to properties. There are detention ponds in subdivisions and a lot of times they are not City owned or our responsibility. Typically it is an easement and the City has flow right easement through that for the City. Typically it is the homeowners of that association that is required to maintain that. A detention pond by design shouldn't be holding water. It should just be retaining water for a period of time and letting it out. At times they aren't maintained by these private organizations and that is something that Rick will also be following up on and taking a look at these different detention ponds.

Mayor Baines called for those wishing to speak in favor.

There were none.

Mayor Baines called for those wishing to speak in opposition.

Andre St. Laurent, Goffstown, NH stated:

First and foremost I am all in favor of the EPA and keeping debris away from streams and wetlands and so on and so forth but we are already doing this on a federal level. For years we have been doing that. What I am seeing and I have read this because Bob asked me to read this but we see a lot of duplication of effort. For instance, if you go to Section 3. Permit Procedure and Requirement it says that no land owner or land operator shall begin any site work on any building, grading, or other land development or any land disturbing activity without first submitting the NOI, which we are doing, to EPA Region I. We are already doing this. The next sentence says the owner must also have received an acknowledgement and have an approved Storm Water Pollution Plan and meet the requirements of the ordinance and the rules and regulations. I see that as a duplication of effort. We are already doing that. I would rather give you people or the Board or whoever our tracking number from the federal government and then you can go in the computer and find us and know that we are doing this versus duplicating efforts. Now it means that I am going to have to submit to the federal government and they are very easy because I go on the computer and within seven days I have a permit. With this ordinance it takes 30 days to get anything from the Board. That is where we are duplicating efforts. That is where if there were something we could reword it would help us. Another place is they want a copy of the NOI and the approved SWPP. Right now on the federal level I handle that. We have a Storm Water Pollution Plan for each site. We have a plan right on site and we have a master plan at the office. If EPA or anyone wants to come and see the site it is there and it is available. Now according to this they want us to send a copy to you people and then you people will approve the SWPP for the related project before beginning any site clearing or construction. Sometimes it is not feasible to do that. Another part also that I have a problem with because any modification or update of the SWPP or the Storm Water Pollution Prevention Plan shall be prepared, signed and sealed by a registered professional engineer. I am not a professional engineer but I have been doing that for years in manufacturing and in construction for the last couple of years. I don't know why we need a registered engineer. I think maybe we could rewrite that. If I am capable of writing a Storm Water Pollution Plan I should be able to modify it. I have a problem with that. I guess it is all in the writing. I would be willing to work with Rick Cantu, whom I have known for years, to rewrite some of that stuff and make it helpful because it looks like it could be done easier. Again, it says within 30 days of receiving an application the Planning Department shall provide one of the following: approval of the permit application or denial. Again, we have been doing that for years and all of our plans have never had to be approved but we have had a visit from EPA on some of our sites and if they see we are doing something wrong, I think this could also be found

through the website. Record keeping for three years. I have no problem with that. We could probably do that because we don't have that many sites but these are the things. I have no problem with, again, EPA and keeping our streams and our wetlands free of debris from general contractors but it is a duplication of effort and I will probably have to hire another guy to keep up with this. We are doing it on a federal level and I think that is sufficient.

Bob Lamontagne, Bedford, NH stated:

I think everything Andre said is true. He is certified to write SWPP's. He has been certified by the EPA and that draft says you have to be a PE. I don't think it is necessary. Another thing is these plans are constantly changing. It sounds like you guys don't want everybody to get the wrong idea that you go to an engineer who develops a plan and you follow it. This plan is constantly changing. Every day a stockpile gets moved or a building gets built or something gets finished up. It is not really practical to get a PE to change the plan. A lot of times the supers on the job have the authority to change the plan. The other thing is if a project gets approved by the Planning Board the SWPP's are always filed by the contractor build the job. Sometimes you don't know who the contractor is when the project gets approved so it is kind of hard to do the SWPP not knowing how the guy is going to build the job. There are a few technicalities that if we could work with your people I think they could be worked out. I think the fee structure...we don't know what that is. There are provisions in there for fees. I can see that going through the roof maybe or a way for the City to collect big amounts of money from developers. I think that is about it.

Mayor Baines advised that all wishing to speak having been heard, the testimony presented will be taken under advisement and considered by the Board of Mayor and Aldermen.

This being a special meeting of the Board, no further business was presented and on motion of Alderman Smith, duly seconded by Alderman Osborne it was voted to adjourn.

A True Record. Attest.

City Clerk

Developer Concerns

Memo

To: Kevin Sheppard
From: Rick Cantu
CC: Tom Seigle, File
Date: 10/17/05
Re: Lamontange Builders Input on Ordinance

I met with Andre St. Laurent of Lamontange Builders on 10/13/05 to go over their concerns with wording in the Ordinance and the Rules and Regulations. They are listed below:

- No specific comments on the Ordinance as it was general in nature and pointed to the more detailed sections of the Rules & Regulations where Andre expressed concerns;
- In the R&R Andre had concerns regarding Section 3 (B), Application Requirements. He wants to know why he has to submit a NOI to the City when he has done one with the EPA. I explained that some developments are submitted by out-of-state firms and their name is used to file the NOI with no idea of how the project is connected to Manchester. It is hard to match up to a local site unless we have the longitude and latitude. If they do provide us with the EPA tracking number, we can find it easy enough. This could easily be amended by adding, "Shall submit to the Department of Highways a copy of the NOI, **or EPA approved permit tracking number**, and approved Storm Water Pollution Prevention Plan..."
- In the same section under (D), Application Procedure (3), we could get by with one copy of the Storm Water Pollution Prevention Plan, as I will use this to keep within their work file. We can change the requirement from two to one
- In Section 4., General Permit Provisions (C), Andre had concerns about using only a P.E. to complete the Storm Water Pollution Prevention Plan. I voiced my concerns about receiving a one and two page Storm Water Pollution Prevention Plan that states they will follow BMPs, EPA regulation, local regulations etc. without listing what specifically they will do at the site. He was comfortable with us designating someone who has experience developing SWPPPs and is approved by the DPW Director. The last sentence could read, "Any update or modification to the Storm Water Pollution Prevention Plan shall be prepared, signed, and sealed by a Registered Professional Engineer, **or by a competent individual individual who has developed SWPPPs and is approved by the Director of Public Works.**"
- In this same section the last paragraph about land disturbance permit be accompanied by a fee raised concerns. We actually do not give out permits. We only write conditions on the Planning Board's approvals. I do not think we want to give out this permit as it is covered by the NOI and

EPA requirements. The fee for review is covered in another section. I had to agree with him that it might be prudent to eliminate this paragraph.

- In item (H) of this same section we would also use the terminology as with the NOI that either contractor submits the NOT to the City or notifies the City that NOT has been submitted with EPA tracking number. We would be able to track in either case.
- In this same section (H), second to the last paragraph, Andre was concerned with the 45-day limit to get as-builts to the City. We talked and he thought that the best would be 120 days. I do not know much about the history of as-build submissions to the Engineering Department, but if this is good for them, we could change it to 120 days.
- In Section 9, Notification of Accidental Discharges and Spills, we had some good discussions. He wanted to know to what extent this was required. If it was required to report a small hydraulic leak that was in the middle of the project and immediately picked up? He also questioned if the case of a diesel or fuel fill with some top off spilling onto the ground would require the notification. He wanted concrete examples in this section. I explained our concerns was any amount of spilled material that leaked outside the permitted containment area, that got into a CB, or reached a wetland, stream, brook, etc. Under (B), release reporting, we could add a second paragraph with this example wording; "For the purpose of clarification the following spills, regardless of size, must be reported:
 - Any size spill that enters a catch basin, culvert, or structure that conveys runoff from the site;
 - Any spill that breaches a silt fence, or other best management control structure;
 - Any material that spills outside a limits of any work area on the site
 - Any material that reaches a wetland, stream, brook, pond etc. whether within the work site or off the work site

We also discussed about keeping a log of small spills that did not meet the above criteria, but may be of some concern if a citizen or employee complaint was logged. We both thought it might be good to log any spill in the daily inspection sheets, and if there was every a question about a certain spill a review of the daily inspection sheet would indicate that there was a small spill and what action was taken to clean it up. This could be written into a third paragraph within this section.

This covered Andre's concerns. Andre thought it would be a good idea to open the Rules & Regulations up to a comment period before adopting them.

Memo

To: File
From: Rick Cantu
CC:
Date: 12/08/05
Re: Artemis Paris Comment on Ordinance and Rules & Regulations

The work or means other. There are six words she wanted to express for clarification.

1. Law – is imposed by a sovereign authority
2. Rule – is more restrictive and less flexible
3. Regulation – often equals rule, carrier stronger implication
4. Statute – law made by a legislative body
5. Ordinance – order governing some detail of procedure or conduct
6. Bylaw – rules for specific types of government

The legal notice only stated that the public hearing was for the Ordinance. This was the only focus of the Public Hearing.

Sections 122.34(3) and 122.26(b) reference that it is an ordinance, or other regulatory mechanism.

Malcolm-Pirnie study said that Manchester must develop a storm system mapping that prohibited through ordinance or other regulatory means illicit discharges.

EPA Fact Sheet addresses BMPs on the Post Construction Ordinance. It was ECFR (1)(E)(F). Artemis asked that I specifically look at ECF 2.7

ATTACHMENT K

Cantu, Rick

From: murphy.thelma@epamail.epa.gov
Sent: Friday, December 02, 2005 2:05 PM
To: Cantu, Rick
Cc: Sheppard, Kevin
Subject: Re: Manchester's SUO and Rules & Regulation



SWaterRules& SWMPOrdinanceSh
RegsClerkFinalRev... ortVerClerkStri...

Hi Rick,

Thank you for letting me review the City's draft ordinance and its supplemental rules & regulations. This appears an effective approach for addressing the requirements of the small MS4 permit.

I have a couple of thoughts to share. On page 2 of the ordinance, it mentions 122.26 which are the regulations for the storm water program. You may also want to include 122.34 which are the requirements for the small MS4 program. Section 53.40 (A) mentions submitting NOI to Region 1, we don't get the NOIs in the Region- they go to Washington. The same paragraph mentions an approved SWPPP, EPA does not approve these plans, so you may want to specify who they plan needs to be approved by. Paragraph (B) of the same section mentions "storm water management plan" are you using this term interchangeable with SWPPP or does it mean something different?

In the rules and regulations there is a mention of "group NPDES permit". We don't issue a permit by that name. It may be referring to the group application process EPA had in the early 1990s, but with the issuance of the 1995 MSGP that process ended.

On page 18 of the rules, there is a reference to conduct comprehensive site evaluations in accordance with 122.26(c)(1). That section of the regulations describes application procedures/requirements for industrial facilities. I don't quite understand the use of that reference in your rules as the requirement for the site evaluation. The requirement to do a comprehensive site evaluation is in the MSGP.

Again, thank you for letting me review this. If you have any questions, please let me know.

Thelma Murphy
Storm Water Coordinator
USEPA - New England
One Congress Street - Suite 1100 (CIP)
Boston, MA 02114
617/918-1615
murphy.thelma@epa.gov

"Cantu, Rick"
<RCANTU@ci.manchester.nh.us>

11/30/2005 02:20 PM

Thelma Murphy/R1/USEPA/US@EPA

"Sheppard, Kevin"
<KSHEPPAR@ci.manchester.nh.us>

Subject
Manchester's SUO and Rules & Regulation

To

cc

ATTACHMENT K

Hi Thelma:

This is a follow up to our conversation this afternoon. As you are aware via conversations with Artemis that she believes the City can either use an Ordinance, or other mechanism to enforce our storm water program. She does not believe that we can augment and reinforce an ordinance with rules and regulations due to the statement of (B) in Section 122.26, under Part 2 (i), Adequate Legal Authority, "Prohibit through ordinance, order or similar means, illicit discharges to the MS4." This same wording is again used in the guidance section on page 203 of section 122.34, but (B) in this instance states, "To the extent allowable under State, Tribal or local law, effectively prohibit, through ordinance or other regulatory mechanism, non-storm water discharges into your storm sewer system and implement appropriate enforcement procedures and actions. I believe this guidance gives us additional capability for enforcement tools in addition to the ordinance.

The State of NH, under Section 49-C:21 of the Administrative code allows Departments, as set up by the City/Town Councils to give authority to Department Heads to develop rules and regulations. "The City shall have departments, divisions and bureaus as may be established by the charger or as the elected body may establish by ordinance.... Each officer shall have supervision and control of his department and of the employees of his department and shall have power to prescribe rules and regulations, not inconsistent with general, the charger, the administrative code...." I believe this authority given by the State allows the City to augment the Ordinance with Rules and Regulations that strengthen the Ordinance.

Another point is that in the City Ordinance in Section 10.07, Rules of Interpretation, (A), AND or OR. Either conjunction shall include the other as if written "and/or," if the sense requires it. This would make Artemis' take on her understanding of OR being non-inclusive (either Ordinance or Rules & Regs, but not both) with AND being all-inclusive (must include the Ordinance and a similar means).

I am attaching our Ordinance and Rules & Regulations, as recently revised for an opinion to Manchester's approach to our storm water program controls. You will note any new material in italicized bold print. Any material that is deleted is in ~~strikeout~~. We will be doing another internal review of the additions and deletions tomorrow and then making a clean version of all the changes. It will be easier to digest if the Ordinance is reviewed first, then the Rules & Regulations.

We will be meeting with Artemis to go over her concerns possibly on Tuesday.

Could you review each document and let me know if what we are proposing meets with the intent of our Storm Water Program requirement of developing an Ordinance as outlined under minimum control #3, Illicit Discharges? I know as the program matures we will need to make additions or changes to our enforcement documents, and realize it will be much easier to change and correct Rules & Regulations than it would be to change or correct an Ordinance.

Thanks for your time,

Rick (See attached file: SWaterRules& RegsClerkFinalRevStrikeout.doc) (See attached file: SWMPOrdinanceShortVerClerkStrikeout.doc)



Memorandum

To: Rick Cantu

From: Steve Landry, DES Merrimack Watershed Supervisor

Date: August 12, 2005

Re: Merrimack River Illicit Discharge Investigations

The purpose of this memorandum is to provide the City of Manchester with pertinent information documented while surveying outfalls as part of the Illicit Discharge Investigation Program at DES, during the summer of 2005. For the past two months personnel in the Watershed Assistance Section at DES have been systematically surveying the Merrimack River and tributaries in Manchester, NH. Each pipe that outfalls to the Merrimack River and its tributaries have been documented; GPS taken and a detailed field sheet completed.

The investigations were carried out during periods of dry weather. The "dry weather" condition is defined by DES as no more than 0.10 inches of rainfall in the past 48 hours. If an outfall was discharging to surface waters and the flow was steady enough to at least partially fill a sample bottle, a sample was collected and had it analyzed for *E. coli* bacteria.

To date we have documented 105 outfalls with 23 flowing enough to sample. Out of the 23 samples 12 had high counts of *E. coli*. High counts are determined by the laboratory for fresh water as above 88 counts of *E. coli* per milliliter of water. Numbers are set by Surface Water Quality Standards, for more information please see enclosed Bacterial Indicators Standard Operating Procedures. We are waiting for 5 sample results, taken August 11, 2005 which will be available August 15, 2005.

Below is a table of our findings to date for the summer of 2005 (results are for *E. coli* measured in counts per milliliter of water):

Town	Date	Sample ID #	Water Body	Results	Status
Manchester	7/7/2005	MER-1600	Merrimack River	1500	Need to return for resample, investigate, some near CSO's
Manchester	7/7/2005	MER-1630	Merrimack River	2700	
Manchester	7/7/2005	MER-1640	Merrimack River	1500	
Manchester	7/14/2005	MER-1810	Merrimack River	660	Need to return for resample/investigate
Manchester	7/27/2005	MER-2010	Merrimack River	420	Resample/investigate
Manchester	7/27/2005	MER-2150	Merrimack River	<100 (dirty)	
Manchester	7/28/2005	PTR-330	Piscataquog River	240	Resample/investigate
Manchester	7/28/2005	PTR-350	Piscataquog River	250	
Manchester	8/1/2005	PTR-460	Piscataquog River	1260	Resample/investigate check to see if CSO has been separated yet or not, CSO #37
Manchester	8/2/2005	MER-2280	Merrimack River	TNTC*	Resample/investigate
Manchester	8/2/2005	MER-2320	Merrimack River	430	
Manchester	8/2/2005	MER-2370	Merrimack River	650	

* TNTC corresponds to a laboratory result of too many *E. coli* specimens to count.

Of particular concern are MER-2310 and MER-2340. Both of these locations show excessive evidence of being functioning CSO's. MER-2310 is a submerged pipe, and could not be sampled. MER-2340 is not listed in the table above due to *E. coli* results of 60counts/mL. The low count could be because the pipe was flowing with only storm water at the day of sampling. Neither of these pipes had a sign for a CSO, as we have seen in other locations along the Merrimack and Piscataquog Rivers.

DES has a copy of the Malcolm Pirnie (MP) study done on the Merrimack River funded by the City of Manchester. Throughout the investigations we have compared notes with the study's findings. It has to be noted that there are discrepancies between our results and MP's. The common discrepancy has been on the outfall pipes' diameters. In the procedures of the study it was not discussed how measurements were taken. Our procedure is to measure the inside diameter of the pipe with a yard stick or tape measure, when possible to reach the mouth of the pipe. Another discrepancy has been pipe material; distance from the pipe could be the problem. On the plus side the maps of the

River and pipe locations have been very helpful. Our only suggestion would be to provide GPS points for the pipe outfalls in the study.

We hope to work with the City of Manchester to eliminate the high *E. coli* counts flowing into the Merrimack and Piscataquog Rivers. Please see enclosed map of the 12 high *E. coli* outfall pipes, field sheets, daily summaries, Bacterial Indicators SOP, and CD with photographs of the outfall pipes and all of the previous mentioned printed information. If you would like data on all 105 outfall pipes please contact Steve Landry.

Contact information:

Steve Landry, Merrimack Watershed Supervisor

NH Department of Environmental Services

Watershed Assistance Section

29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

Tel (603) 271-2969 * Fax (603) 271-7894

www.des.state.nh.us/wmb/was/

Follow Up on the NHDES Illicit Discharge Report

- 42° 58' 11.3" N - 71° 28' 32.5" W 42° 58' 11.47" N - 71° 28' 32.43" W City GPS
 8/16/2005 **MER-2320** is outfall is the PPO-190 that is reported in the 1-50 section worksheet.
 E. Coli This is before the offramp leading to Second Steet. The pipe had a trickle of
 430 flow < 1/2 gpm. GIS indicates only the turnpike median is drained by this pipe. It
 may be animal waste. \\H\VOL2\DEPTS\EPI \\H\VOL2\DEPTS\EPD **City Pic**
- 42° 59' 27.8" N - 71° 28' 14.4" W
 7/14/2005 NHDES located **MER-1810** on the west bank underneath the Everett Turnpike just
 E. Coli downstream of the railroad abutments. Will have to investigate this further by
 660 boat as access is limited. MER-1810.JPG
- 42° 59' 21.1" N - 71° 28' 10.4" W
 7/27/2005 NHDES located **MER-2010** in the Mill area behind Commercial Street.
 E.Coli We will need to investigate this further. Need to use a boat as access is
 420 limited. No picture included on CD.
- 42° 59' 8.4" N - 71° 28' 9.0" W
 7/27/2005 NHDES located **MER-2150** in the Mill area off the back deck of Jillians Resturant.
 E.Coli This is our Combined Sewer Overflow-045. It does discharge heavily during rains
 <100 with associated trash. It is tied to the Verizon Wireless Arena where we've had
 some previous issues with cleaning of the animals after a circus.
\\H\VOL2\DEPTS\EPI \\H\VOL2\DEPTS\EPI **City Pic**
- 42° 57' 43.6" N - 71° 28' 30.7" W
 8/2/2005 NHDES located **MER-2370** off the Everett Turnpike. Upon further review
 E.Coli it is found that this outfall is located well into Bedford and is a discharge that
 650 is found between two streets. No further action will be taken on this outfall other
 than to notify Bedford. \\H\VOL2\DEPTS\EPI
- 42° 58' 23.6" N - 71° 28' 19.0" W
 8/11/2005 NHDES located **MER-2450** on the east bank downstream of the Queen City Bridge
 E.Coli No coliform results were available at the time of report submission.
 <10 We will identify and test further. **MER-2440** is also in this location.
\\H\VOL2\DEPTS\EPI Not located on the map that was provided.
- 42° 58' 22.8" N - 71° 28' 19.6" W
 8/11/2005 NHDES located **MER-2460** on the east bank downstream of the Queen City Bridge
 E.Coli No coliform results were available at the time of report submission.
 10 We will identify and test further. **Water is warm and there is a CL2 smell**
\\H\vol2\depts\Epd\Us This is our PPO-122 and is a permitted discharge
\\H\VOL2\DEPTS\EPD\ **City Pic** from NYCOA
- 42° 57' 0.0" N - 71° 28' 43.6" W
 8/11/2005 NHDES located **MER-2520 & 2525** on the east bank downstream of the Queen City
 E.Coli Bridge. No coliform results were available at the time of report submission.
 <100 We will identify and test further. This is our Combined Sewer Overflow-042
 <50 \\H\vol2\depts\Epd\Us Bank is steep, will need to be
MER-2525.JPG accessed from the river.



ATTACHMENT N

Round One (1) of the Outfall Inspection Report Log

June 1, 2005 through April 30, 2006

	Date	PPO #	Active	Findings	Pic Link
1	6/7/2005	124	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Low discharge - cooling water from NYCOA?	\\H1\VOL2\IDE
2	6/7/2005	124(A)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pipe from yard drains near garages	\\H1\VOL2\IDE
3	6/7/2005	123	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Tiny trickle - NYCOA air conditioner?	\\H1\VOL2\IDE
4	6/7/2005	122	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Intake Cooling Water Discharge - NYCOA	\\H1\VOL2\IDE
5	6/7/2005	121	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Abandoned pipe above PPO122 - no sign of activity	\\H1\VOL2\IDE
6	6/7/2005	120	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Old Weir sluice gate that appears unused	\\H1\VOL2\IDE
7	6/7/2005	119	<input type="checkbox"/> Yes <input type="checkbox"/> No	Could not find in location, maybe the 118A?	
8	6/7/2005	118(A)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Corroged Pipe, no discharge, no CBs feeding line	\\H1\VOL2\IDE
9	6/7/2005	118	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Corroged Pipe, no discharge, no CBs feeding line	\\H1\VOL2\IDE
10	6/7/2005	117	<input type="checkbox"/> Yes <input type="checkbox"/> No	Pipe into water, if discharging flow is clear	\\H1\VOL2\IDE
11	6/7/2005	17.5 New	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	New drain cluvert from Riverwalk work - CB feeds it	\\H1\VOL2\IDE
12	6/7/2005	116	<input type="checkbox"/> Yes <input type="checkbox"/> No	Could not find in location stated in GIS mapping	
13	6/7/2005	127	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Perforated rusted corroged drain	\\H1\VOL2\IDE
14	6/7/2005	128	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Brook and CB drain from Riverdale	\\H1\VOL2\IDE
15	6/7/2005	193	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Town line, drains highway CB	\\H1\VOL2\IDE
16	6/7/2005	CSO 009	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Clean drainage from CBs in Shiller St. Area	\\H1\VOL2\IDE
17	6/7/2005	191	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Drains highway CBs - no drainage large swale area	\\H1\VOL2\IDE
18	6/7/2005	2506-2G	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CB road drain from highway - no discharge	\\H1\VOL2\IDE
19	8/16/2005	190	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	State tested coliform - MER-2320, count was 430	\\H1\VOL2\IDE
20	6/7/2005	2606-26	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CB road drain from highway - no discharge	\\H1\VOL2\IDE
21	6/7/2005	189	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Cement drain from highway drainage - clean discharge	\\H1\VOL2\IDE
22	6/7/2005	3502-3F	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CB road drain from highway - no discharge	\\H1\VOL2\IDE
23	6/7/2005	2504-3F	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CB road drain from highway - no discharge	\\H1\VOL2\IDE
24	6/7/2005	2506-3F	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CB road drain from highway - no discharge Plugged	\\H1\VOL2\IDE
25	8/5/2005	CSO-45	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Slight clear drainage - no contamination	\\H1\VOL2\IDE
26	8/5/2005	98	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Under bridge, no discharge	\\H1\VOL2\IDE
27	8/5/2005	99	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Off to the right side of the bridge, no drainage	\\H1\VOL2\IDE
28	8/5/2005	100	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Two pipes out of side of building, neither discharging	\\H1\VOL2\IDE
29	8/5/2005	101	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Two pipes out of side of building, neither discharging	Above
30	8/5/2005	101a	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Stone archway - may discharge during rains	\\H1\VOL2\IDE
31	8/5/2005	102	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Two pipes out of side of building, neither discharging	\\H1\VOL2\IDE
32	8/5/2005	103	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Some evidence of previous discharge - clean	\\H1\VOL2\IDE
33	8/5/2005	104	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Two pipes out of side of building, neither discharging	See 102
34	8/5/2005	105	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Some evidence of previous discharge - clean	\\H1\VOL2\IDE
35	8/5/2005	106	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Side of building - no sign of discharge	\\H1\VOL2\IDE
36	8/5/2005	106a	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Possible 2 disconnected pipes and one abandoned	\\H1\VOL2\IDE
37	8/5/2005	107	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pipe covered by mudflap - no activity	\\H1\VOL2\IDE
38	8/5/2005	107a	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pipe in wall, covered by vines - no activity	See 107
	8/5/2005	Activity		Lint discharging from dryer vent at E&R Laundry turn over to IPP	\\H1\VOL2\IDE
39	8/5/2005	108	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Side of building - no sign of discharge	\\H1\VOL2\IDE
40	8/5/2005	109	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pipe covered by mudflap - no activity	see 109
41	8/5/2005	201	<input type="checkbox"/> Yes <input type="checkbox"/> No	Pipe coming from side of river bank - not discharging	\\H1\VOL2\IDE
42	8/5/2005	202	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pipe in side of river bank - not currently discharging	\\H1\VOL2\IDE
43	8/5/2005	96	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	30" drain - not active, but runs during rainstorms	\\H1\VOL2\IDE
44	8/5/2005	95	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pipe under granite foundation - no discharge	\\H1\VOL2\IDE
45	8/5/2005	95a	<input type="checkbox"/> Yes <input type="checkbox"/> No	Erosion exposed pipe - not currently discharging	\\H1\VOL2\IDE
46	8/5/2005	94	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Drain to river - not discharging - may be totally inactive	\\H1\VOL2\IDE
47	8/5/2005	94 a&b	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2 pipes out of building hidden by vines - not discharging	\\H1\VOL2\IDE
48	8/5/2005	93	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Concrete pipe along riverbank - no signs of any discharge	\\H1\VOL2\IDE
49	8/5/2005	92	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Broken pipe out of building - not discharging	\\H1\VOL2\IDE
50	8/5/2005	91	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Drain off bldg. - not discharging - may be totally inactive	\\H1\VOL2\IDE



ATTACHMENT N

Round One (1) of the Outfall Inspection Report Log

June 1, 2005 through April 30, 2006

	Date	PPO #	Active	Findings	Pic Link
51	8/5/2005	91a	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	New PVC pipe at end of walkway - not discharging	\\H1\VOL2\
52	8/5/2005	91b	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Opening in wall - not discharging - past activity - clean	\\H1\VOL2\
53	8/5/2005	91c	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Abandoned pipe - no long-term activity - blends in wall	\\H1\VOL2\
54	8/5/2005	90	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pipe in stone foundation - no long-term activity	\\H1\VOL2\
55	8/5/2005	89	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pipe in stone foundation - no long-term activity	\\H1\VOL2\
56	8/5/2005	88	<input type="checkbox"/> ? Yes <input type="checkbox"/> ? No	Iron pipe into Merrimack - no discharge currently	\\H1\VOL2\
57	8/5/2005	88a	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Abandoned pipe - no long-term activity - blends in wall	\\H1\VOL2\
58	8/5/2005	88b	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Stone archway - currently discharging - water smells - test	\\H1\VOL2\
59	8/5/2005	87	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Broken abandoned pipe - no long-term activity	\\H1\VOL2\
60	8/5/2005	86	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Stone box discharge - no current discharge	\\H1\VOL2\
61	8/5/2005	85	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Side of building - no sign of discharge	\\H1\VOL2\
62	8/5/2005	84	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Side of building - no sign of discharge	\\H1\VOL2\
63	8/5/2005	83	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Side of building - no sign of discharge	\\H1\VOL2\
64	8/5/2005	82	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Side of building - no sign of discharge - fire sprinkler relief	\\H1\VOL2\
65	8/5/2005	81	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Broken pipe out of building - not discharging	\\H1\VOL2\
66	8/5/2005	81a	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	36" drain at the end of Textile St. 1760-3E	\\H1\VOL2\
67	8/5/2005	81b	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Two gated archways - no sign of recent discharge	\\H1\VOL2\
68	9/6/2005	149	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Conc. Headwall - 12" Pipe / no discharge	\\H1\VOL2\
69	9/6/2005	150	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12" Conc pipe draining out of side of bank - Sampled	\\H1\VOL2\
70	9/6/2005	151	<input type="checkbox"/> Yes <input type="checkbox"/> No	Pipe out of side of bank - Sampled - Need to revisit	No Pic
71	9/6/2005	2742-3D	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Rock opening in side of bank - area looked wet no discharge	\\H1\vol2\de
72	9/6/2005	2739-3D	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	A little wet from drainage flow - high iron water	\\H1\VOL2\
73	9/6/2005	2730-3D	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Wet area drainage from above CB outlet	2730-3D.jp
74	9/6/2005	152	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Drain pipe from off ramp - flowing	PPO152.jp
75	9/6/2005	19339	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Brook drainage - from off ramp of Everett Turnpike	19339.jpg
76	9/6/2005	200	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	42" RCP discharging between 10 - 15 GPM - sampled	PPO200.jp
77		52 - 53	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	36" Conc & 10" Conc. In side of bldg. No sign of discharge	PPO52-53.
78		55 - 56	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	30" & 12" RCP no sign of discharge	PPO55-56.
79		50	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6" CI pipe from side of building - no discharge	PPO50.jpg
80		54	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	8" CI pipe from foundation - no discharge	PPO54.jpg
81		57,58,59	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Three Stone intake archways - River water no apparent Q	PPO57,58.
82		60	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Small 2" CI pipe in side of wall after 3 archways.	PPO60.jpg
83		62	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	42" RCP drain line. No discharge	PPO62.jpg
84		62A	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Square hole in building above PPO 60	\\H1\VOL2\
85		63	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Street drain in bottom of walkway	\\H1\VOL2\
86		67-68	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Two Stone Archways underneath Bridge Street	\\H1\VOL2\
87		88b	<input type="checkbox"/> Yes <input type="checkbox"/> No	Stone Archway listed above - tested No coliform	\\H1\VOL2\
88			<input type="checkbox"/> Yes <input type="checkbox"/> No		
89			<input type="checkbox"/> Yes <input type="checkbox"/> No		
90			<input type="checkbox"/> Yes <input type="checkbox"/> No		
91			<input type="checkbox"/> Yes <input type="checkbox"/> No		
92			<input type="checkbox"/> Yes <input type="checkbox"/> No		
93			<input type="checkbox"/> Yes <input type="checkbox"/> No		
94			<input type="checkbox"/> Yes <input type="checkbox"/> No		
95			<input type="checkbox"/> Yes <input type="checkbox"/> No		
96			<input type="checkbox"/> Yes <input type="checkbox"/> No		
97			<input type="checkbox"/> Yes <input type="checkbox"/> No		
98			<input type="checkbox"/> Yes <input type="checkbox"/> No		
99			<input type="checkbox"/> Yes <input type="checkbox"/> No		

MANCHESTER WATER WORKS LABORATORY

1581 Lake Shore Road Manchester, NH 03109 (60 3)624-6482

COLLECTION DATE:	7/11/05	ANALYSIS DATE:	7/11/05
COLLECTION BY:	EG/AK	ANALYSIS BY:	CAW/KBC/MMP

MHD Bacteria Worksheet

Beach Sites

Sample ID#	Site Location	Well Readings	Total Coliform / 100 mLs	E. coli / 100 mLs
05-4240	Merrimack River / Arms Park	49/47;36/8	2420	76
05-4241	Merrimack River / Victoria St	49/48;38/3	>2420	73
05-4242	Merrimack River / Chauncey Ave	49/47;30/4	2420	50
05-4243	Merrimack River / Intervale CC	49/48;40/3	>2420	81
05-4244	Electric St Dock	49/48;49/48	>2420	>2420
05-4245	Upland St Beach- L	49/48;49/48	>2420	>2420
05-4246	Upland St Beach- R	49/48;49/48	>2420	>2420
05-4247	Trestle	49/48;49/48	>2420	>2420
05-4248	Piscatoquog / Theo Raco Park	49/48;49/48	>2420	>2420
05-4249	Piscatoquog / Bass Island	49/48;49/48	>2420	>2420
05-4250	Crystal Lake- L	49/48;41/12	>2420	110
05-4251	Crystal Lake- R	49/44;11/1	1553	7
05-4252	Melody Pines- L	49/37;11/1	921	13
05-4253	Melody Pines- R	49/34;4/0	770	13
05-4254	Camp Carpenter- R	49/48;7/0	>2420	4
05-4255	Camp Carpenter- L	49/46;6/0	1986	6
Repeat	Merrimack River / Chauncey Ave	49/47;29/8	2420	55
Control-1 Lot#05-6	Negative Control Sterile Water	0/0	0	0
Control-2 Lot#05-20	Negative Culture: <i>Pseudomonas aeruginosa</i>	0/0	0	0
Control-3 Lot#05-21	TC +/- EC - Culture: <i>Klebsiella pneumoniae</i>	48/49;0/0	>2420	0
Control-4 Lot#05-22	TC + / EC + Culture: <i>Escherichia coli</i>	48/49;48/49	>2420	>2420

Comments: Crystal lake Left and ALL Piscatoquog samples (6 sites) >88 E.coli count
 *Certified NELAP method and procedure.

Method: 9223 D + UV P/A colilert

Read By: kbc/mmp

**Checked by CAW

Signature: _____ Date: _____

MANCHESTER WATER WORKS LABORATORY
1581 Lake Shore Road Manchester, NH 03109 (60 3)624-6482

COLLECTION DATE: 7/13/05 Resamples	ANALYSIS DATE: 7/13/05
COLLECTION BY: EG/AK	ANALYSIS BY: CAW

MHD Bacteria Worksheet
Beach Sites

Sample ID#	Site Location	Well Readings	Total Coliform / 100 mLs	E. coli / 100 mLs
05-4322	Electric St Dock	49/34;49/7	1540	358
05-4323	Upland St Beach- R	49/39;48/16	2092	456
05-4324	Upland St Beach- L	49/43;49/18	2828	616
05-4325	Trestle	49/39;48/19	2092	520
05-4326	Piscatoquog / Theo Raco Park	49/47;48/13	4840	402
05-4327	Piscatoquog / Bass Island	All;46/11	>4840	304
Repeat	Piscatoquog / Bass Island	49/47;47/13	4840	358
Control-1 Lot#05-6	Negative Control Sterile Water	0	0	0

Comments:

1:1 dilution of samples requiring a multiplier of 2 to MPN table readings based on well count. Samples have a high *E. coli* count.

Method: 9223 D + UV P/A colilert using QuantiTray 2K (MPN)
Read By: CAW

Signature: Cheryl Wood

Date: 7/14/05

MANCHESTER WATER WORKS LABORATORY
1581 Lake Shore Road Manchester, NH 03109 (60 3)624-6482

COLLECTION DATE:	7-25-05	ANALYSIS DATE:	7-25-05
COLLECTION BY:	EG/AK	ANALYSIS BY:	KBC

MHD Bacteria Worksheet
Beach Sites

Sample ID#	Site Location	Well Readings	Total Coliform / 100 mLs	E. coli / 100 mLs
05-4554	Merrimack River / Arms Park	49/48:49/24	>2420	435 *
05-4555	Merrimack River / Victoria St	49/42:7/2	1300	10
05-4556	Merrimack River / Chauncey Ave	49/40:27/2	1120	40
05-4557	Merrimack River / Intervale CC	49/48:23/2	>2420	33
05-4561	Trestle	49/43:9/2	1414	12
05-4558	Electric St Dock	49/45:5/1	1733	6
05-4560	Upland St Beach- R	49/35:5/0	816	5
05-4559	Upland St Beach- L	49/38:4/0	980	4
05-4562	Piscatoquog / Theo Raco Park	49/48:27/4	>2420	44
05-4563	Piscatoquog / Bass Island	49/48:48/19	>2420	260 *
05-4568	Crystal Lake- R	49/42:3/0	1300	3
05-4569	Crystal Lake- L	49/46:6/0	1986	6
05-4566	Melody Pines- L	49/42:5/0	1300	5
05-4567	Melody Pines- R	49/48:9/0	>2420	10
05-4564	Camp Carpenter- R	49/28:1/0	548	1
05-4565	Camp Carpenter- L	49/25:0/0	461	<1
Repeat	Victoria St	49/37:3/2	921	5
Control-1 Lot#05-6	Negative Control Sterile Water	0/0:0/0	<1	<1
Control-2 Lot#05-20	Negative Culture: <i>Pseudomonas aeruginosa</i>	0/0:0/0	<1	<1
Control-3 Lot#05-21	TC +/- EC - Culture: <i>Klebsiella pneumoniae</i>	49/48:0/0	>2420	<1
Control-4 Lot#05-22	TC + / EC + Culture: <i>Escherichia coli</i>	49/48:49/48	>2420	>2420

Comments:

Method: 9223 D + UV P/A Colilert

Read By: KBC

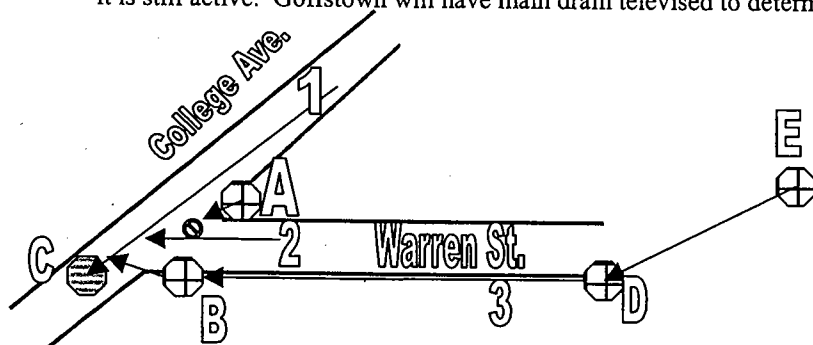
**Checked by

Signature: _____

Date: _____

There is a main Drain manhole[C] on College Ave. that gets the majority of the flow from the large drain [1] on this street. The side street drain from Warren Avenue [3] ties into the main drain pipe. This picks up CB [B, D and E].

CB [A] does not directly tie into the College Ave drain, but flows toward where the blockage was and connects to an unknown pipe [2]. It is believed this pipe was left from the construction in the 1950s and that a few houses are still tied into this "what was once thought as" an abandoned line. The Town of Goffstown crew used a sewer jet to push the blockage from the blocked area out to the main line [1] on College Ave. What was observed was toilet paper and fecal matter. The fecal matter was still in solid clumps and the toilet paper in matted mass to indicate the sewage had not traveled far. It is suspected that one to maybe three or four homes are tied onto the "what was once thought as" an abandoned line and that it is still active. Goffstown will have main drain televised to determine where pipe [2] enters.



The NHDES had reported finding sewage behind Bartlett Elementary School in Goffstown. This was traced back to the shaded manhole above.

In conjunction with this finding, the City of Manchester's Health Department had found high coliform counts along several sites on the Piscataquog River during their routine weekly summer sampling. The storm water department was notified and inspected outfalls within its City of Manchester's border. No source could be found. It was discovered that the source was above the Biron Street location of the Goffstown Town Metering Station. Manchester contacted Goffstown and was informed of the NHDES findings.

Manchester assisted Goffstown with dye testing of the residents along College Avenue and Warren Street. Not all dye testing could be confirmed and not dye was found in the suspect drain. The City of Manchester then used the smoke tester to try to confirm if all houses were tied into the sewer. The drain was then smoke tested, but due to the number of open grated catch basins tied to this drain, no conclusive findings could be uncovered.

Goffstown hired Underground Testing Services to televise the drain and sewers in the area. This is when the #2 pipe (listed in the above diagram) was discovered. It was decided to dig up the street and plug this line (as it was believed abandoned). Goffstown would wait until resident(s) called with back up issues and then would see that these people were hooked up to an active sewer line. No calls were received and the subsequent testing of the Piscataquog shows no coliform.

Manchester will test the outfall from the Bartlett Elementary School, that enters the Piscataquog River above the Biron Street Metering Station, a few times during the spring to assure this problem has been rectified.

ATTACHMENT Q

Cantu, Rick

From: Seigle, Thomas
Sent: Tuesday, January 03, 2006 11:18 AM
To: Cantu, Rick
Subject: FW: Sewer Drain GIS Update process

FYI

From: Brennen, Jayson [mailto:BrennenJD@cdm.com]
Sent: Friday, December 23, 2005 11:03 AM
To: Seigle, Thomas; Davini, Jay
Cc: Laliberte, Joseph; Koziell, Bryson
Subject: Sewer Drain GIS Update process

All,

Based on our meeting today, the following is what I understood the process/responsibilities to be...

1. Bryson will complete all the updates within 2 weeks. At that point, we will load the data into the City's SDE system and all users will be able to have access to it. We will also print out a few sets of updated atlas maps.
2. CDM will figure out the amount of time spent on CDM, HTA, and City edits and will provide two invoices to the City... one to Tom for the HTA updates and one to Jay for the Highway updates. Jay will then approve the Highway updates and forward the invoice to Tom.
3. For the Future Updates....
 - 3a. CDM will complete all updates for CDM work. Once a project's as-builts are complete, CDM will obtain the City's sewer GIS from the SDE system, update the data, and load the data back onto the City's SDE system. It is estimated that updates will take about 2 weeks. During that time, Highway will not make edits.
 - 3b. CDM will update the GIS based on changes found by CDM as part of the preliminary design reports. For future reports, we will build in a small budget into the report. For the past reports, Joe is going to go through to see if there is budget within the studies. For the small ones, we will just take care of it. Like the above, when we make the changes, we obtain the data from the City's SDE system, change it, and reload it.
 - 3c. Highway will handle ongoing daily changes. For example, when Tom finds an error, he will mark it on a map and send it to Jay to update. It is recommended that these be done quarterly depending on the number of changes.
 - 3d. Highway will handle new sewers that are being put in with new subdivisions. However, the process for how the as-builts for these systems flow down to Jay needs to be identified.

Tom, I think the link to the City's GIS Web Application is... <http://ia/giswebsde>. It may be a shortcut on your system. I would have check if your screen resolution is set up correctly to allow you to see the site correctly. Are you around next week? I will stop by or my way in.

Does the above seem correct?

Jayson

4/7/2006